Docket No.: PC-0032 US

"Express Mail" mailing label number EL 743 380 543 US. I hereby certify that this document and referenced attachments are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under37 CFR § 1.10, addressed to: Commissioner for Patents, Box Patent Application, Washington, D.C. 20231 on January 9, 2001 .

By: Nancy Ramos Printed: Nancy Ramos

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Roopa Reddy, Y. Tom Tang, Mariah R. Baughn, Randi E. Krasnow

Title: ASIP RELATED PROTEINS

Serial No.:	To Be Assigned	Filed:	Herewith
Examiner:	To Be Assigned	Group Art Unit:	To Be Assigned

Commissioner for Patents
Box Sequence
Washington, D.C. 20231

SUBMISSION UNDER 37 CFR §1.821- 1.825 SEQUENCE LISTING

Sir:

In accordance with the requirements of 37 CFR §1.821- 1.825, Applicants hereby submit one (1) diskette containing the computer-readable information for the "Sequence Listing" of the above-identified application. The diskette complies with the requirements of 37 CFR §1.824 and is IBM PC compatible using a UNIX operating system with PERL Program.

Accompanying the application is the paper copy of the Sequence Listing as disclosed in the application.

The content of the "Sequence Listing" paper copy is identical to the computer readable copy, as required under 37 CFR § 1.821(f).

Respectfully submitted,

INCYTE GENOMICS, INC.

Date: January 9, 2001

David G. Streeter, Ph.D.
Reg. No. 43,168
Direct Dial Telephone: (650) 845-5741

3160 Porter Drive
Palo Alto, California, 94304
Tel. No. 650-855-0555
Fax. No. 650-849-8886

PC-0032 US

<110> Reddy, Roopa
Tang, Y. Tom
Baughn, Mariah R.
Krasnow, Randi E.

<120> ASIP-RELATED PROTEINS

<130> PC-0032 US

<140> To Be Assigned
<141> Herewith

<160> 63
<170> PERL Program

<210> 1
<211> 935
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1555118CD1

<400> 1

```
Met Lys Val Thr Val Cys Phe Gly Arg Thr Gly Ile Val Val Pro
  1               5                  10                  15
Cys Lys Glu Gly Gln Leu Arg Val Gly Glu Leu Thr Gln Gln Ala
             20                  25                  30
Leu Gln Arg Tyr Leu Lys Thr Arg Glu Lys Gly Pro Gly Tyr Trp
             35                  40                  45
Val Lys Ile His His Leu Glu Tyr Thr Asp Gly Gly Ile Leu Asp
             50                  55                  60
Pro Asp Asp Val Leu Ala Asp Val Val Glu Asp Lys Asp Lys Leu
             65                  70                  75
Ile Ala Val Phe Glu Glu Gln Glu Pro Leu His Lys Ile Glu Ser
             80                  85                  90
Pro Ser Gly Asn Pro Ala Asp Arg Gln Ser Pro Asp Ala Phe Glu
             95                 100                 105
Thr Glu Val Ala Ala Gln Leu Ala Ala Phe Lys Pro Ile Gly Gly
            110                 115                 120
Glu Ile Glu Val Thr Pro Ser Ala Leu Lys Leu Gly Thr Pro Leu
            125                 130                 135
Leu Val Arg Arg Ser Ser Asp Pro Val Pro Gly Pro Pro Ala Asp
            140                 145                 150
Thr Gln Pro Ser Ala Ser His Pro Gly Gly Gln Ser Leu Lys Leu
            155                 160                 165
Val Val Pro Asp Ser Thr Gln Asn Leu Glu Asp Arg Glu Val Leu
            170                 175                 180
Asn Gly Val Gln Thr Glu Leu Leu Thr Ser Pro Arg Thr Lys Asp
            185                 190                 195
Thr Leu Ser Asp Met Thr Arg Thr Val Glu Ile Ser Gly Glu Gly
            200                 205                 210
Gly Pro Leu Gly Ile His Val Val Pro Phe Phe Ser Ser Leu Ser
            215                 220                 225
```

```
Gly Arg Ile Leu Gly Leu Phe Ile Arg Gly Ile Glu Asp Asn Ser
                230                 235                 240
Arg Ser Lys Arg Glu Gly Leu Phe His Glu Asn Glu Cys Ile Val
                245                 250                 255
Lys Ile Asn Asn Val Asp Leu Val Asp Lys Thr Phe Ala Gln Ala
                260                 265                 270
Gln Asp Val Phe Arg Gln Ala Met Lys Ser Pro Ser Val Leu Leu
                275                 280                 285
His Val Leu Pro Pro Gln Asn Arg Glu Gln Tyr Glu Lys Ser Val
                290                 295                 300
Ile Gly Ser Leu Asn Ile Phe Gly Asn Asn Asp Gly Val Leu Lys
                305                 310                 315
Thr Lys Val Pro Pro Pro Val His Gly Lys Ser Gly Leu Lys Thr
                320                 325                 330
Ala Asn Leu Thr Gly Thr Asp Ser Pro Glu Thr Asp Ala Ser Ala
                335                 340                 345
Ser Leu Gln Gln Asn Lys Ser Pro Arg Val Pro Arg Leu Gly Gly
                350                 355                 360
Lys Pro Ser Ser Pro Ser Leu Ser Pro Leu Met Gly Phe Gly Ser
                365                 370                 375
Asn Lys Asn Ala Lys Lys Ile Lys Ile Asp Leu Lys Lys Gly Pro
                380                 385                 390
Glu Gly Leu Gly Phe Thr Val Val Thr Arg Asp Ser Ser Ile His
                395                 400                 405
Gly Pro Gly Pro Ile Phe Val Lys Asn Ile Leu Pro Lys Gly Ala
                410                 415                 420
Ala Ile Lys Asp Gly Arg Leu Gln Ser Gly Asp Arg Ile Leu Glu
                425                 430                 435
Val Asn Gly Arg Asp Val Thr Gly Arg Thr Gln Glu Glu Leu Val
                440                 445                 450
Ala Met Leu Arg Ser Thr Lys Gln Gly Glu Thr Ala Ser Leu Val
                455                 460                 465
Ile Ala Arg Gln Glu Gly His Phe Leu Pro Arg Glu Leu Lys Gly
                470                 475                 480
Glu Pro Asp Cys Cys Ala Leu Ser Leu Glu Thr Ser Glu Gln Leu
                485                 490                 495
Thr Phe Glu Ile Pro Leu Asn Asp Ser Gly Ser Ala Gly Leu Gly
                500                 505                 510
Val Ser Leu Lys Gly Asn Lys Ser Arg Glu Thr Gly Thr Asp Leu
                515                 520                 525
Gly Ile Phe Ile Lys Ser Ile Ile His Gly Gly Ala Ala Phe Lys
                530                 535                 540
Asp Gly Arg Leu Arg Met Asn Asp Gln Leu Ile Ala Val Asn Gly
                545                 550                 555
Glu Ser Leu Leu Gly Lys Ser Asn His Glu Ala Met Glu Thr Leu
                560                 565                 570
Arg Arg Pro Met Ser Met Glu Gly Asn Ile Arg Gly Met Ile Gln
                575                 580                 585
Leu Val Ile Leu Arg Arg Pro Glu Arg Pro Met Glu Asp Pro Ala
                590                 595                 600
Glu Cys Gly Ala Phe Ser Lys Pro Cys Phe Glu Asn Cys Gln Asn
                605                 610                 615
Ala Val Thr Thr Ser Arg Arg Asn Asp Asn Ser Ile Leu His Pro
                620                 625                 630
Leu Gly Thr Cys Ser Pro Gln Asp Lys Gln Lys Gly Leu Leu Leu
                635                 640                 645
```

```
Pro Asn Asp Gly Trp Ala Glu Ser Glu Val Pro Pro Ser Pro Thr
                  650                 655                 660
Pro His Ser Ala Leu Gly Leu Gly Leu Glu Asp Tyr Ser His Ser
                  665                 670                 675
Ser Gly Val Asp Ser Ala Val Tyr Phe Pro Asp Gln His Ile Asn
                  680                 685                 690
Phe Arg Ser Val Thr Pro Ala Arg Gln Pro Glu Ser Ile Asn Leu
                  695                 700                 705
Lys Ala Ser Lys Ser Met Asp Leu Val Pro Asp Glu Ser Lys Val
                  710                 715                 720
His Ser Leu Ala Gly Gln Lys Ser Glu Ser Pro Ser Lys Asp Phe
                  725                 730                 735
Gly Pro Thr Leu Gly Leu Lys Lys Ser Ser Ser Leu Glu Ser Leu
                  740                 745                 750
Gln Thr Ala Val Ala Glu Val Arg Lys Asn Asp Leu Pro Phe His
                  755                 760                 765
Arg Pro Arg Pro His Met Val Arg Gly Arg Gly Cys Asn Glu Ser
                  770                 775                 780
Phe Arg Ala Ala Ile Asp Lys Ser Tyr Asp Gly Pro Glu Glu Ile
                  785                 790                 795
Glu Ala Asp Gly Leu Ser Asp Lys Ser Ser His Ser Gly Gln Gly
                  800                 805                 810
Ala Leu Asn Cys Glu Ser Ala Pro Gln Gly Asn Ser Glu Leu Glu
                  815                 820                 825
Asp Met Glu Asn Lys Ala Arg Lys Val Lys Lys Thr Lys Glu Lys
                  830                 835                 840
Glu Lys Lys Lys Glu Lys Gly Lys Leu Lys Val Lys Glu Lys Lys
                  845                 850                 855
Arg Lys Glu Glu Asn Glu Asp Pro Glu Arg Lys Ile Lys Lys Lys
                  860                 865                 870
Gly Phe Gly Ala Met Leu Arg Tyr Gly Pro Ala Leu Lys Ala Lys
                  875                 880                 885
Leu Val Leu Ile Leu Ser Leu Leu Lys Lys Ala His Ala Phe Pro
                  890                 895                 900
Arg Leu Gln Pro Asn Ala Tyr Gly Ser Gln Phe Cys Ala Arg Ser
                  905                 910                 915
Leu Ser Ala Glu Ala Glu Glu Leu Phe Gly Glu Ser Tyr Ser Asp
                  920                 925                 930
Asp Arg Thr Leu Ser
                  935
```

<210> 2
<211> 1356
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2582063CD1

<400> 2

```
Met Lys Val Thr Val Cys Phe Gly Arg Thr Arg Val Val Val Pro
  1               5                  10                  15
Cys Gly Asp Gly His Met Lys Val Phe Ser Leu Ile Gln Gln Ala
                 20                  25                  30
Val Thr Arg Tyr Arg Lys Ala Ile Ala Lys Asp Pro Asn Tyr Trp
```

```
                    35                  40                  45
Ile Gln Val His Arg Leu Glu His Gly Asp Gly Gly Ile Leu Asp
                    50                  55                  60
Leu Asp Asp Ile Leu Cys Asp Val Ala Asp Asp Lys Asp Arg Leu
                    65                  70                  75
Val Ala Val Phe Asp Glu Gln Asp Pro His His Gly Gly Asp Gly
                    80                  85                  90
Thr Ser Ala Ser Ser Thr Gly Thr Gln Ser Pro Glu Ile Phe Gly
                    95                 100                 105
Ser Glu Leu Gly Thr Asn Asn Val Ser Ala Phe Gln Pro Tyr Gln
                   110                 115                 120
Ala Thr Ser Glu Ile Glu Val Thr Pro Ser Val Leu Arg Ala Asn
                   125                 130                 135
Met Pro Leu His Val Arg Arg Ser Ser Asp Pro Ala Leu Ile Gly
                   140                 145                 150
Leu Ser Thr Ser Val Ser Asp Ser Asn Phe Ser Ser Glu Glu Pro
                   155                 160                 165
Ser Arg Lys Asn Pro Thr Arg Trp Ser Thr Thr Ala Gly Phe Leu
                   170                 175                 180
Lys Gln Asn Thr Ala Gly Ser Pro Lys Thr Cys Asp Arg Lys Lys
                   185                 190                 195
Asp Glu Asn Tyr Arg Ser Leu Pro Arg Asp Thr Ser Asn Trp Ser
                   200                 205                 210
Asn Gln Phe Gln Arg Asp Asn Ala Arg Ser Ser Leu Ser Ala Ser
                   215                 220                 225
His Pro Met Val Gly Lys Trp Leu Glu Lys Gln Glu Gln Asp Glu
                   230                 235                 240
Asp Gly Thr Glu Glu Asp Asn Ser Arg Val Glu Pro Val Gly His
                   245                 250                 255
Ala Asp Thr Gly Leu Glu His Ile Pro Asn Phe Ser Leu Asp Asp
                   260                 265                 270
Met Val Lys Leu Val Glu Val Pro Asn Asp Gly Gly Pro Leu Gly
                   275                 280                 285
Ile His Val Val Pro Phe Ser Ala Arg Gly Gly Arg Thr Leu Gly
                   290                 295                 300
Leu Leu Val Lys Arg Leu Glu Lys Gly Gly Lys Ala Glu His Glu
                   305                 310                 315
Asn Leu Phe Arg Glu Asn Asp Cys Ile Val Arg Ile Asn Asp Gly
                   320                 325                 330
Asp Leu Arg Asn Arg Arg Phe Glu Gln Ala Gln His Met Phe Arg
                   335                 340                 345
Gln Ala Met Arg Thr Pro Ile Ile Trp Phe His Val Val Pro Ala
                   350                 355                 360
Ala Asn Lys Glu Gln Tyr Glu Gln Leu Ser Gln Ser Glu Lys Asn
                   365                 370                 375
Asn Tyr Tyr Ser Ser Arg Phe Ser Pro Asp Ser Gln Tyr Ile Asp
                   380                 385                 390
Asn Arg Ser Val Asn Ser Ala Gly Leu His Thr Val Gln Arg Ala
                   395                 400                 405
Pro Arg Leu Asn His Pro Pro Glu Gln Ile Asp Ser His Ser Arg
                   410                 415                 420
Leu Pro His Ser Ala His Pro Ser Gly Lys Pro Pro Ser Ala Pro
                   425                 430                 435
Ala Ser Ala Pro Gln Asn Val Phe Ser Thr Thr Val Ser Ser Gly
                   440                 445                 450
Tyr Asn Thr Lys Lys Ile Gly Lys Arg Leu Asn Ile Gln Leu Lys
```

```
                455                 460                 465
Lys Gly Thr Glu Gly Leu Gly Phe Ser Ile Thr Ser Arg Asp Val
                470                 475                 480
Thr Ile Gly Gly Ser Ala Pro Ile Tyr Val Lys Asn Ile Leu Pro
                485                 490                 495
Arg Gly Ala Ala Ile Gln Asp Gly Arg Leu Lys Ala Gly Asp Arg
                500                 505                 510
Leu Ile Glu Val Asn Gly Val Asp Leu Val Gly Lys Ser Gln Glu
                515                 520                 525
Glu Val Val Ser Leu Leu Arg Ser Thr Lys Met Glu Gly Thr Val
                530                 535                 540
Ser Leu Leu Val Phe Arg Gln Glu Asp Ala Phe His Pro Arg Glu
                545                 550                 555
Leu Asn Ala Glu Pro Ser Gln Met Gln Ile Pro Lys Glu Thr Lys
                560                 565                 570
Ala Glu Asp Glu Asp Ile Val Leu Thr Pro Asp Gly Thr Arg Glu
                575                 580                 585
Phe Leu Thr Phe Glu Val Pro Leu Asn Asp Ser Gly Ser Ala Gly
                590                 595                 600
Leu Gly Val Ser Val Lys Gly Asn Arg Ser Lys Glu Asn His Ala
                605                 610                 615
Asp Leu Gly Ile Phe Val Lys Ser Ile Ile Asn Gly Gly Ala Ala
                620                 625                 630
Ser Lys Asp Gly Arg Leu Arg Val Asn Asp Gln Leu Ile Ala Val
                635                 640                 645
Asn Gly Glu Ser Leu Leu Gly Lys Thr Asn Gln Asp Ala Met Glu
                650                 655                 660
Thr Leu Arg Arg Ser Met Ser Thr Glu Gly Asn Lys Arg Gly Met
                665                 670                 675
Ile Gln Leu Ile Val Ala Arg Arg Ile Ser Lys Cys Asn Glu Leu
                680                 685                 690
Lys Ser Pro Gly Ser Pro Pro Gly Pro Glu Leu Pro Ile Glu Thr
                695                 700                 705
Ala Leu Asp Asp Arg Glu Arg Arg Ile Ser His Ser Leu Tyr Ser
                710                 715                 720
Gly Ile Glu Gly Leu Asp Glu Ser Pro Ser Arg Asn Ala Ala Leu
                725                 730                 735
Ser Arg Ile Met Gly Glu Ser Gly Lys Tyr Gln Leu Ser Pro Thr
                740                 745                 750
Val Asn Met Pro Gln Asp Asp Thr Val Ile Ile Glu Asp Asp Arg
                755                 760                 765
Leu Pro Val Leu Pro Pro His Leu Ser Asp Gln Ser Ser Ser Ser
                770                 775                 780
Ser His Asp Asp Val Gly Phe Val Thr Ala Asp Ala Gly Thr Trp
                785                 790                 795
Ala Lys Ala Ala Ile Ser Asp Ser Ala Asp Cys Ser Leu Ser Pro
                800                 805                 810
Asp Val Asp Pro Val Leu Ala Phe Gln Arg Glu Gly Phe Gly Arg
                815                 820                 825
Gln Ser Met Ser Glu Lys Arg Thr Lys Gln Phe Ser Asp Ala Ser
                830                 835                 840
Gln Leu Asp Phe Val Lys Thr Arg Lys Ser Lys Ser Met Asp Leu
                845                 850                 855
Gly Ile Ala Asp Glu Thr Lys Leu Asn Thr Val Asp Asp Gln Lys
                860                 865                 870
Ala Gly Ser Pro Ser Arg Asp Val Gly Pro Ser Leu Gly Leu Lys
```

875 880 885
Lys Ser Ser Ser Leu Glu Ser Leu Gln Thr Ala Val Ala Glu Val
890 895 900
Thr Leu Asn Gly Asp Ile Pro Phe His Arg Pro Arg Pro Arg Ile
905 910 915
Ile Arg Gly Arg Gly Cys Asn Glu Ser Phe Arg Ala Ala Ile Asp
920 925 930
Lys Ser Tyr Asp Lys Pro Ala Val Asp Asp Asp Asp Glu Gly Met
935 940 945
Glu Thr Leu Glu Glu Asp Thr Glu Glu Ser Ser Arg Ser Gly Arg
950 955 960
Glu Ser Val Ser Thr Ala Ser Asp Gln Pro Ser His Ser Leu Glu
965 970 975
Arg Gln Met Asn Gly Asn Gln Glu Lys Gly Asp Lys Thr Asp Arg
980 985 990
Lys Lys Asp Lys Thr Gly Lys Glu Lys Lys Lys Asp Arg Asp Lys
995 1000 1005
Glu Lys Asp Lys Met Lys Ala Lys Lys Gly Met Leu Lys Gly Leu
1010 1015 1020
Gly Asp Met Phe Arg Phe Gly Lys His Arg Lys Asp Asp Lys Ile
1025 1030 1035
Glu Lys Thr Gly Lys Ile Lys Ile Gln Glu Ser Phe Thr Ser Glu
1040 1045 1050
Glu Glu Arg Ile Arg Met Lys Gln Glu Gln Glu Arg Ile Gln Ala
1055 1060 1065
Lys Thr Arg Glu Phe Arg Glu Arg Gln Ala Arg Glu Arg Asp Tyr
1070 1075 1080
Ala Glu Ile Gln Asp Phe His Arg Thr Phe Gly Cys Asp Asp Glu
1085 1090 1095
Leu Met Tyr Gly Gly Val Ser Ser Tyr Glu Gly Ser Met Ala Leu
1100 1105 1110
Asn Ala Arg Pro Gln Ser Pro Arg Glu Gly His Met Met Asp Ala
1115 1120 1125
Leu Tyr Ala Gln Val Lys Lys Pro Arg Asn Ser Lys Pro Ser Pro
1130 1135 1140
Val Asp Ser Asn Arg Ser Thr Pro Ser Asn His Asp Arg Ile Gln
1145 1150 1155
Arg Leu Arg Gln Glu Phe Gln Gln Ala Lys Gln Asp Glu Asp Val
1160 1165 1170
Glu Asp Arg Arg Arg Thr Tyr Ser Phe Glu Gln Pro Trp Pro Asn
1175 1180 1185
Ala Arg Pro Ala Thr Gln Ser Gly Arg His Ser Val Ser Val Glu
1190 1195 1200
Val Gln Met Gln Arg Gln Arg Gln Glu Glu Arg Glu Ser Ser Gln
1205 1210 1215
Gln Ala Gln Arg Gln Tyr Ser Ser Leu Pro Arg Gln Ser Arg Lys
1220 1225 1230
Asn Ala Ser Ser Val Ser Gln Asp Ser Trp Glu Gln Asn Tyr Ser
1235 1240 1245
Pro Gly Glu Gly Phe Gln Ser Ala Lys Glu Asn Pro Arg Tyr Ser
1250 1255 1260
Ser Tyr Gln Gly Ser Arg Asn Gly Tyr Leu Gly Gly His Gly Phe
1265 1270 1275
Asn Ala Arg Val Met Leu Glu Thr Gln Glu Leu Leu Arg Gln Glu
1280 1285 1290
Gln Arg Arg Lys Glu Gln Gln Met Lys Lys Gln Pro Pro Ser Glu

```
                1295                1300                1305
Gly Pro Ser Asn Tyr Asp Ser Tyr Lys Lys Val Gln Asp Pro Ser
                1310                1315                1320
Tyr Ala Pro Pro Lys Gly Pro Phe Arg Gln Asp Val Pro Pro Ser
                1325                1330                1335
Pro Ser Gln Val Ala Arg Leu Asn Arg Leu Gln Thr Pro Glu Lys
                1340                1345                1350
Gly Arg Pro Phe Tyr Ser
                1355
```

<210> 3
<211> 2968
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1555118CB1

<400> 3

```
aaggggcgct gccgcgagcc tccgggcctc agggtgttcc ggggagcggc gccccgggtc 60
tctgggccca cccgccccgg gcgtcctccg agagtggggg ctgcgcccgc ggggtcagac 120
acctgttcgg cccggccccgg cgtggtcgcc gggggccagg atgaaagtga ccgtgtgctt 180
cggcaggacg ggcatcgtgg tgccctgcaa ggagggccag ctgcgcgtcg gcgagctcac 240
ccagcaggcg ctgcagcggt acctgaagac ccgggagaag ggtcctggtt actgggtgaa 300
gattcatcac ttagaatata cagatggagg aatcctggat ccagatgatg tcttggcaga 360
tgttgttgaa gataaagaca agctgattgc tgtgtttgaa gaacaagaac cactccacaa 420
gattgagagc cccagtggaa accctgcaga tcggcagagc ccagatgctt ttgagacaga 480
agtggccgcc caactggctg catttaagcc aattggtggg gagattgaag taacccctc 540
tgctctaaaa ctaggcactc cactgctggt gaggagaagc agtgacccag tgccaggccc 600
acctgctgat acccagccaa gcgcttcaca ccctggtggc cagagtctga aactggttgt 660
tccagattcc acgcagaact tggaagacag agaagttttg aatggtgtac agacagaact 720
actaacttcg ccaagaacta aggacacatt gagtgatatg acaagaacag tggagatttc 780
tggggaagga ggcccattgg gaatacatgt agtgcccttc ttttcatctc tgagtggaag 840
gattctagga ctcttcatcc gaggcattga agacaacagc aggtccaagc gggagggact 900
atttcacgaa aatgaatgta ttgtaaaaat caacaatgtg gatctcgtag acaaaacctt 960
tgctcaggct caagatgtct tccgccaggc aatgaaatct ccaagtgtgc tcctccacgt 1020
gcttcctcca caaaaccgtg aacagtatga aaagtcagtc attggctctc ttaacatttt 1080
tggtaataat gatggcgttt tgaaaaccaa agtgccgcct cctgtccatg gaaaatcggg 1140
actaaagaca gcaaatctca caggaaccga tagtcctgaa acagatgcat cagcttccct 1200
gcaacaaaac aagagtcccc gagtaccaag gctgggagga aaaccatcct ctccctcact 1260
ctcgcctctc atgggatttg gcagcaataa aaatgcaaag aaaattaaga ttgacctaaa 1320
gaaaggccct gaaggacttg gtttcactgt ggttaccaga gactcttcca tacatggtcc 1380
cggtcccatt tttgtaaaaa acattttacc aaagggagca gcaataaaag atggccgcct 1440
acaatcaggg gacagaattt tggaggtaaa tgggagagat gtcaccggac gaacccagga 1500
agagcttgtg gccatgctca ggagcaccaa gcaggggggag acagcatcgc tggtcattgc 1560
ccgccaagaa ggacattttc tgccccgaga gttgaaagga gaacctgact gctgtgcact 1620
ctctctggag acaagcgagc agctcacctt tgagatcccc ctgaatgatt caggttctgc 1680
tggcctcggg gtgagcttaa aagggaacaa atccagagaa actggaacag acttggggat 1740
ttttatcaaa tccatcattc atggaggcgc tgcttttaag gatggtcgtc tgcgaatgaa 1800
tgaccagctg attgcagtta atggggaatc tcttttggga aagtccaacc acgaagctat 1860
ggaaacactt aggcggccaa tgtccatgga gggaaacatc cgagggatga tccagttggt 1920
gattctgagg aggccagaga gaccaatgga ggatcctgca gagtgtgggg cattttccaa 1980
gccatgcttt gagaactgtc aaaatgctgt aaccacctct aggcgaaatg ataatagtat 2040
cctgcatcca cttggcactt gcagtccaca agacaaacag aaaggtctat tgctgcccaa 2100
tgacggatgg gccgagagtg aagttccacc ttctccaaca ccacattctg ctctgggatt 2160
```

gggcctcgaa gattacagcc acagctctgg ggtggattca gcagtatatt ttccagatca 2220
gcacatcaac ttcagatctg tgacaccggc caggcagcct gaatcaatta atttgaaagc 2280
ctcgaagagc atggaccttg tgccagatga aagcaaggtt cactcattgg ctggacaaaa 2340
atcggaatct ccaagcaaag attttggtcc aactctgggt ttgaaaaagt ccagctcctt 2400
ggagagtctg cagactgcag tggccgaggt caggaagaat gaccttccct ttcacaggcc 2460
ccggccgcac atggttcgag gccgaggctg caatgagagc tttagagcag ccattgacaa 2520
atcctacgat ggacctgaag aaatagaagc tgacggtctg tctgataaga gctctcactc 2580
tggccaagga gctctgaatt gtgagtctgc ccctcagggg aattcggagc tagaggacat 2640
ggaaaataaa gccaggaaag tcaaaaaaac gaaagagaag gagaagaaaa aggaaaaggg 2700
caaattgaaa gtcaaggaga aaaagcgcaa agaggagaat gaagatccag aaaggaaaat 2760
aaagaagaag ggcttcggcg ccatgctgag gtatgggcct gctttgaagg caaagttggt 2820
tctcattttg tctctcctga aaaaagcgca cgcttttcct cgtcttcagc caaatgcata 2880
cggctctcaa ttctgtgctc gttctctttc tgcagaggca gaggagcttt ttggggaaag 2940
ttacagtgat gacaggacac tgtcttaa 2968

<210> 4
<211> 194
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1555118H1

<400> 4
caacaccaca ttctgctctg ggattgggcc tcgaagatta cagccacagc tctggggtgg 60
attcagcagt atattttcca gatcagcaca tcaacttcag atctgtgaca ccggccaggc 120
agcctgaatc aattaatttg aaagcctcga agagcatgga ccttgtgcca gatgaaagca 180
aggttcactc attg 194

<210> 5
<211> 533
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 7227391H1

<400> 5
ggaatctgga acaaccagtt tcagactctg gccaccaggt gtgaagcgct tggctgggta 60
tcagcaggtg ggcctggcac tgggtcactg cttctcctca ccagcagtgg agtgcctagt 120
tttagagcag aaggggttac ttcaatctcc ccaccaattg gcttaaatgc agccagttgg 180
gcggccactt ctgtctcaaa agcatctggg ctctgccgat ctgcagggtt tccactgggg 240
ctctcaatct tgtggagtgg ttcttgttct tcaaacacag caatcagctt gtctttatct 300
tcaacaacat ctgccaagac atcatctgga tccaggattc ctccatctgt atattctaag 360
tgatgaatct tcacccagta accaggaccc ttctcccggg tcttcaggta ccgctgcagc 420
gcctgctggg tgagctcgcc gacgcgcagc tggccctcct tgcagggcac cacgatgccc 480
gtcctgccga agcacacggt cactttcatc ctggcccccg gcgaccacgc cgg 533

<210> 6
<211> 588
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<223> Incyte ID No: 70158486V1

<400> 6
ccatggacag gaggcggcac tttggttttc aaaacgccat cattattacc aaaaatgtta 60
agagagccaa tgactgactt ttcatactgt tcacggtttt gtggaggaag cacgtggagg 120
agcacacttg gagatttcat tgcctggcgg aagacatctt gagcctgagc aaaggttttg 180
tctacgagat ccacattgtt gatttttaca atacattcat tttcgtgaaa tagtccctcc 240
cgcttggacc tgctgttgtc ttcaatgcct cggatgaaga gtcctagaat ccttccactc 300
agagatgaaa agaagggcac tacatgtatt cccaatgggc ctccttcccc agaaatctcc 360
actgttcttg tcatatcact caatgtgtcc ttagttcttg gcgaagttag tagttctgtc 420
tgtacaccat tcaaaacttc tctgtcttcc aagttctgcg tggaatctgg aacaaccagt 480
ttcagactct ggccaccagg gtgtgaagcg cttggctggg tatcagcagg tgggcctggc 540
actggggtca tgcttctcat cacaagcagt ggagtgccta gttttaga 588

<210> 7
<211> 481
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 70162686V1

<400> 7
gaccatgtat ggaagagtct ctggtaacca cagtgaaacc aagtccttca gggcctttct 60
ttaggtcaat cttaattttc tttgcatttt tattgctgcc aaatcccatg agaggcgaga 120
gtgagggaga ggatggtttt cctcccagcc ttggtactcg gggactcttg ttttgttgca 180
gggaagctga tgcgtctgtt tcaggactat cggttcctgt gagatttgct gtctttagtc 240
ccgattttcc atggacagga ggcggcactt tggttttcaa aacgccatca ttattaccaa 300
aaatgttaag agagccaatg actgactttt catactgttc acggttttgt ggaggaaagc 360
acgtggagga gcacacttgg agatttcatt gcctggcgga agacatcttg agcctgagca 420
aaggttttgt ctacgagatc cacattgttg atttttacaa tacattcatt ttcgggaaat 480
a 481

<210> 8
<211> 355
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 70151326V1

<400> 8
accagagact cttccataca tggtcccggt cccatttttg taaaaaacat tttaccgaag 60
ggagcagcaa taaaagatgg ccgcctacaa tcaggggaca gaattttgga ggtaaatggg 120
agagatgtca ctggacgaac ccaggaagag cttgtggcca tgctcaggag caccaagcag 180
ggggagacag catcgctggt cattgcccgc caagaaggac attttctgcc ccgagagttg 240
aaaggagaac ctgactgctg tgcactctct ctggagacaa gcgagcagct caccttgag 300
aatccccctg gatgattcag gttctgctgg cctcggggtg agcttaaaag ggaac 355

<210> 9
<211> 417
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 70154198V1

<400> 9
gctgtaatct tcgaggccca atcccagagc agaatgtggt gttggagaag gtggaacttc 60
actctcggcc catccgtcat tgggcagcaa tagacctttc tgtttgtctt gtggactgca 120
agtgccaagt ggatgcagga tactattatc atttcgccta gaggtggtta cagcattttg 180
acagttctca aagcatggct tggaaaatgc cccacactct gcaggatcct ccattggtct 240
ctctggcctc ctcagaatca ccaactggat catccctcgg atggttccct ccatggacat 300
tggccgccta agtgtttcca tagcttcgtg gttggacttc ccaaaagaga ttccccatta 360
cggcaatcac tggtcattca tttgcagacg accatccttt aaagcagcgc cttcacg 417

<210> 10
<211> 537
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2084238T6

<400> 10
ccttgacttt caatttgccc ttttcctttt tcttctcctt ctctttcgtt tttttgactt 60
tcctggcttt attttccatg tcctctagct ccgaattccc ctgaggggca gactcacaat 120
tcagagctcc ttggccagag tgagagctct tatcagacag accgtcagct tctatttctt 180
caggtccatc gtaggatttg tcaatggctg ctctaaagct ctcattgcag cctcggcctc 240
gaaccatgtg cggccggggc ctgtgaaagg gaaggtcatt cttcctgacc tcggccactg 300
cagtctgcag actctccaag gagctggact ttttcaaacc cagagttgga ccaaaatctt 360
tgcttggaga ttccgatttt tgtccagcca atgagtgaac cttgctttca tctggcacaa 420
ggtccatgct cttcgaggct ttcaaattaa ttgattcagg ctgctggccg gtgtcacaga 480
tctgaagttg atgtgctgat ctggaaaata tactgctgaa tccaccccag agtgtgg 537

<210> 11
<211> 498
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 70155923V1

<400> 11
cctttctgga tcttcattct cctcttggcg ctttttctcc ttgactttca atttgccctt 60
tccctttcc ttctccttct ctttcgtttt tttgactttc ctggcttaat ttcccatgtc 120
ctctagctcc gaattcccct gaggggcaga ctcacaattc agagctcctt ggccagagtg 180
aaagctctta tcagacagac cgtcagcttc aatttcttaa ggtccatcgt aggatttgca 240
aatggctgct ctaaagctct cattgaagcc tcggcctcga accatgtgcg gccggggcct 300
ttgaaaggga aggtcattct tcctgacctc ggccactgca gtttgcagac tctccaagga 360
gctggacttt tctaaaccca gagttggccc aaaatctttg cttggaaatt ccgatttttg 420
tccagccaat gagtgaacct tgctttcatc tggcaccagg tccatgccct tcggggcttt 480
caaattaatt ggattcag 498

<210> 12
<211> 498
<212> DNA

<213> Rattus norvegicus

<220>
<221> misc_feature
<223> Incyte ID No: 702457609T1

<400> 12
ttggctttat tttccacaca catctagctc agggtttccc tgaggggcag actcacaatt 60
cagagctgtg tggcccgagt gagagctctt atcagacaga ccatcagctt ctgcctcttc 120
tggcccgtcg taagatttgt caatggctgc tcgagaagct ctcattgcag ccccggccgt 180
cgcaccatgt gtggtctggg tctgtggaag ggcagatcat tcttcctgac ttcagccaca 240
gcagtctgta ggctctccaa ggaactggac tttttcaggc ccagggttgg accaaaatct 300
ttgcctggag agtctgacct gcgatcagcc agtgactgga ctttgctttc gtctggcaca 360
aggtccatgc tcttggaggc tttcaggtta attgattcgg gctgcccgac gtggtgtcac 420
aattctgaaa ttgacatgtt gatctggaaa atatcctgtg gaatccactc tagagctgtg 480
actgaagtct tcaaggcc 498

<210> 13
<211> 460
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<223> Incyte ID No: 702458746T1

<400> 13
gtgtggcccg aagtgagagc tcttatcaga cagaccatca gcttctgcct cttctggccc 60
gtcgtaagat ttgtcaatgg ctgctcggaa gctctcattg cagccccggc ctcgcaccat 120
gtgtggtctg ggtctgtgga agggcagatc attcttcctg acttcagcca cagcagtctg 180
taggctctcc aaggaactgg acttttttcag gcccagggtt ggaccaaaat ctttgcctgg 240
agagtctgac ctgcgatcag ccagtgactg gactttgctt tcgtctggca caaggtccat 300
gctcttggag gctttcaggt taattgattc gggctgcccg actggtgtca caattctgaa 360
attgacatgt tgatctggaa aatatcctgt ggaatccact ctagagctgt gactgaagtc 420
ttcaaggccc cattccagac tgggatgtgg tggcggggac 460

<210> 14
<211> 245
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<223> Incyte ID No: 701335936H1

<400> 14
aaaggccccg aaggacttgg attcactgtg ggaactagag attcttggat acatggacct 60
ggtcccattt ttgtaaaaaa tatcctacca aagggagcag cagtaaagga tggccgccta 120
caatcaggag acagaatttt agaggtaaat ggcagagatg tcacaggaag aacccaggaa 180
gaacttgtgg ccatgctgag gagcactaag cagggagaga cggtatcact ggtcattgcc 240
cgcca 245

<210> 15
<211> 260
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<223> Incyte ID No: 700639694H1

<400> 15
attttggtcc aaccctgggc ctgaaaaagt ccagttcctt ggagagccta cagactgctg 60
tggctgaagt caggaagaat gatctgccct tccacagacc cagaccacac atggtgcgag 120
gccggggctg caatgagagc ttccgagcag ccattgacaa atcttacgac gggccagaag 180
aggcagaagc tgatggtctg tctgataaga gctctcgctc gggccacaca gctctgaatt 240
gtgagtctgc ccctcaggga 260

<210> 16
<211> 211
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<223> Incyte ID No: 700639694F6

<400> 16
gatctgccct tccacagacc cagaccacac atggtgcgag gccggggctg caatgagagc 60
ttccgagcag ccattgacaa atcttacgac gggccagaag aggcagaagc tgatggtctg 120
tctgataaga gctctcgctc gggccacaca gctctgaatt gtgagtctgc ccctcaggga 180
aaccctgagc tagatgatgt ggaaaataaa g 211

<210> 17
<211> 276
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<223> Incyte ID No: 701191467H1

<400> 17
ctatagtcca caagataaaa ggaaagacct attgcttccc agtgatgggt gggctgagaa 60
tgaagtaccg ccgtccccgc caccacatcc cagtctggaa tggggccttg aagacttcag 120
tcacagctct agagtggatt cacaggatat tttccagatc accatgtcaa tttcagaatt 180
gtgacaccag tcgggcagcc cgaatcaatt aacctgaaag cctccaggag catggacctt 240
gtgccagacg aaagcaaagt ccagtcactg gctgat 276

<210> 18
<211> 555
<212> DNA
<213> Canis familiaris

<220>
<221> misc_feature
<223> Incyte ID No: 702771158H1

<400> 18
aagatgttcc accttccccc cctcagcacc acagagtggc ctaccaggaa atgggtagac 60
caggccccga gggggcagcc cagaccagta cccctaccgc gcccaggatc ccaggcagaa 120
gaaccccatg actgcagccg tgtagctgaa taccaccgag ctcagcccag cccagaaggg 180
cgacatctga catcaccttc gccctcccta gactcttaag gccttcctcc tgtccagaag 240

tctccatggt acagataggt tttgctcacc gaggttgcaa cacttgactg ctgaccagag 300
gggaaaagga gaggacagga gggtgggaga gaaaggacag gagtcacaaa gacagcactg 360
cctgggattt gaaatatgtt tagaatctct cagttgaggg caagtggcag ttgagcaggc 420
aaataccaat ggagacatag cacacggggc ctccctggcg tacaccattc ataacttctc 480
catcttctaa gttctgtgtg gaatctagaa taacaggttt cagactctgg ccactggggt 540
gtgaagcact tggct 555

<210> 19
<211> 257
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<223> Incyte ID No: 701266650H1

<400> 19
gaaaaatgca aaaaaaatta agattgacct aaagaaaggc cctgagggac ttggattcac 60
tgtggaacca gagattcttc tatacatggt cctggtccca tttctgtaaa aaacatctta 120
ccaaaaggag cagcagtaaa ggatggccgc ctacaatcag gggacagaat tttggaggta 180
aatggcagag atgttacagg aagaacccaa gaagaactcg tggccatgtt aaggagcacc 240
aagcagggag agacagt 257

<210> 20
<211> 5689
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2582063CB1

<400> 20
atgaaagtga ccgtgtgctt cggacggacc cgggtggtcg tgccgtgcgg ggacggccac 60
atgaaagttt tcagcctcat ccagcaggcg gtgacccgct accggaaggc catcgccaag 120
gatccaaact actggataca ggtgcatcgc ttggaacatg gagatggagg aatactagac 180
cttgatgaca ttctttgtga tgtagcagac gataaagaca gactggtagc agtgtttgat 240
gagcaggatc cacatcacgg aggtgatggc accagtgcca gttccacggg tacccagagc 300
ccagagatat ttggtagtga gcttggcacc aacaatgtct cagcctttca gccttaccaa 360
gcaacaagtg aaattgaggt cacaccttca gtccttcgag caaatatgcc tcttcatgtt 420
cgacgcagta gtgacccagc tctaattggc ctctccactt ctgtcagtga tagtaatttt 480
tcctctgaag agccttcaag gaaaaatccc acacgctggt caacaacagc tggcttcctc 540
aagcagaaca ctgctgggag tcctaaaacc tgcgacagga agaaagatga aaactacaga 600
agcctcccgc gggatactag taactggtct aaccaatttc agagagacaa tgctcgctcg 660
tctctgagtg ccagtcaccc aatggtgggc aagtggctgg agaaacaaga acaggatgag 720
gatgggacag aagaggataa cagtcgtgtt gaacctgttg gacatgctga cacgggtttg 780
gagcatatac ccaacttttc tctggatgat atggtaaagc tcgtagaagt ccccaacgat 840
ggagggcctc tgggaatcca tgtagtgcct ttcagtgctc gaggcggcag aaccctgggg 900
ttattagtaa aacgattgga gaaaggtggt aaagctgaac atgaaaatct ttttcgtgag 960
aatgattgca ttgtcaggat taatgatggc gaccttcgaa atagaagatt tgaacaagca 1020
caacatatgt ttcgccaagc catgcgtaca cccatcattt ggttccatgt ggttcctgca 1080
gcaaataaag agcagtatga acaactatcc caaagtgaga agaacaatta ctattcaagc 1140
cgttttagcc ctgacagcca gtatattgac aacaggagtg tgaacagtgc agggcttcac 1200
acggtgcaga gagcaccccg actgaaccac ccgcctgagc agatagactc tcactcaaga 1260
ctacctcata gcgcacaccc ctcgggaaaa ccaccatccg ctccagcctc ggcacctcag 1320
aatgtattta gtacgactgt aagcagtggt tataacacca aaaaaatagg caagaggctt 1380

aatatccagc ttaagaaagg tacagaaggt ttgggattca gcatcacttc cagagatgta 1440
acaataggtg gctcagctcc aatctatgtg aaaaacattc tcccccgggg ggcggccatt 1500
caggatggcc gacttaaggc aggagacaga cttatagagg taaatggagt agatttagtg 1560
ggcaaatccc aagaggaagt tgtttcgctg ttgagaagca ccaagatgga aggaactgtg 1620
agccttctgg tctttcgcca ggaagacgcc ttccacccaa gggaactgaa tgcagagcca 1680
agccagatgc agattccaaa agaaacgaaa gcagaagatg aggatattgt tcttacacct 1740
gatggcacca gggaatttct gacatttgaa gtcccactta atgattcagg atctgcaggc 1800
cttggtgtca gtgtcaaagg taaccggtca aaagagaacc acgcagattt gggaatcttt 1860
gtcaagtcca ttattaatgg aggagcagca tctaaagatg gaaggcttcg ggtgaatgat 1920
caactgatag cagtaaatgg agaatccctg ttgggcaaga caaaccaaga tgccatggaa 1980
accctaagaa ggtctatgtc tactgaaggc aataaacgag gaatgatcca gcttattgtt 2040
gcaaggagaa taagcaagtg caatgagctg aagtcacctg ggagcccccc tggacctgag 2100
ctgcccattg aaacagcgtt ggatgataga gaacgaagaa tttcccattc cctctacagt 2160
gggattgagg ggcttgatga atcgcccagc agaaatgctg ccctcagtag gataatgggt 2220
gagtcaggta aataccagct gtcccctaca gtgaatatgc cccaagatga cactgtcatt 2280
atagaagatg acaggttgcc agtgcttcct ccacatctct ctgaccagtc ctcttccagc 2340
tcccatgatg atgtggggtt tgtgacggca gatgctggta cttgggccaa ggctgcaatc 2400
agtgattcag ccgactgctc tttgagtcca gatgttgatc cagttcttgc ttttcaacga 2460
gaaggatttg gacgtcagag tatgtcagaa aaacgcacaa agcaattttc agatgccagt 2520
caattggatt tcgttaaaac acgaaaatca aaaagcatgg atttaggtat agctgacgag 2580
actaaactca atacagtgga tgaccagaaa gcaggttctc ccagcagaga tgtgggtcct 2640
tccctgggtc tgaagaagtc aagctcgttg gagagtctgc agaccgcagt tgccgaggtg 2700
actttgaatg gggatattcc tttccatcgt ccacggccgc ggataatcag aggcagggga 2760
tgcaatgaga gcttcagagc tgccatcgac aaatcttatg ataaacccgc ggtagatgat 2820
gatgatgaag gcatggagac cttggaagaa gacacagaag aaagttcaag atcagggaga 2880
gagtctgtat ccacagccag tgatcagcct tcccactctc tggagagaca aatgaatgga 2940
aaccaagaga aaggtgataa gactgataga aaaaaggata aaactggaaa agaaaagaag 3000
aaagatagag ataaggagaa ggataaaatg aaagccaaga agggaatgct gaagggcttg 3060
ggagacatgt tcaggtttgg caaacatcga aaagatgaca agattgagaa aacgggtaaa 3120
ataaaaatac aggaatcctt tacatcagaa gaggagagga tacgaatgaa gcaggagcag 3180
gagaggattc aagccaaaac tcgagaattt agggaacgac aagctcgaga gcgtgactat 3240
gctgaaattc aagattttca tcggacattt ggctgtgatg atgagttaat gtatggggga 3300
gtttcttctt atgaaggttc catggctctc aacgctagac ctcagagccc acgagaaggg 3360
catatgatgg atgctttgta tgcccaagtc aagaagccgc ggaattccaa accctcacct 3420
gtagacagta acagatcaac tcctagcaat catgatcgga tacagcgtct gaggcaagaa 3480
tttcagcaag caaagcaaga tgaagatgta gaagatcgtc ggcggaccta tagttttgag 3540
caaccctggc cgaacgcacg gccggcgacg cagagcgggc gacactcggt gtccgtggag 3600
gtgcagatgc agcggcagcg gcaggaggag cgcgagagct cccagcaggc ccagcgccag 3660
tacagctctc tgcctcggca aagcaggaaa aatgccagct cggtctccca ggactcttgg 3720
gagcagaact actcccctgg ggaaggcttc cagagtgcca aagagaaccc caggtactcc 3780
agctaccaag gctccaggaa cggctacctg ggaggacatg gcttcaacgc cagggtcatg 3840
ctggaaactc aggagctcct tcgccaggaa cagaggcgga aggagcagca gatgaagaag 3900
cagcctcctt ccgaggggcc cagcaactat gactcgtata agaaagtcca ggaccccagt 3960
tacgcccctc ccaaggggcc cttccggcaa gatgtgcccc cctccccttc tcaggttgcg 4020
aggctgaaca gacttcagac tcctgagaaa gggaggccct tctattcctg agcacgcaaa 4080
taacggatgc ttcatgtcgc gcaataaaag acattttcct atgaagactt gtattttggg 4140
agttttttta aaacctcgat ggtactatgg agtatttctg ttgttggtat cagtgccttt 4200
aagcggtgta ggcaaagaaa tggaaggcct taatgtcttt gccactatgt ctcaagtgtc 4260
tgtttcatgg aaggatttcc caccctgtga caatcatctg tttgaggtgt tcatatgctc 4320
tgcgcctctc cacagtacca ggaatctcgg ccctactcat gagttgtccg cggcttggtt 4380
gtaacatccc tgcaccactt gcagtgacaa attcacctga agtggaggat gacgtgcggc 4440
cctgtttctc cctctaagtt ctcttagcta tgggatgaca tcttagtctc tggtggagga 4500
aaagtgggcg acatacacca aaaattgggg ctttctggta cttcacagca cagccatttg 4560
tcgtactttg tcatcactgt ggttttctct ttcctttctc agctctttgt gacgggagag 4620
tcggtcatcc tattacagaa gctaagccat agtccaacat tgtttggtca ccatgggggt 4680
ccttttgtaa ctgccttatg actcaacatt accaataaag tgatgatcct ggtctgcgtt 4740

tatacatacg cttgttcggt cctgttcctg acacgtgggt tgagtcacca cagctctgtg 4800
tggggaacgt gggagacagg agtggctcct gccgggggaa gctgggcctg ccattggccc 4860
tgtgtctatc atgaggggag agctaagaaa gaaattctcc taggaagagc tcatggccca 4920
gtacatccta gtaattattt taattagttt ttgttctgac agcttgtcag gaagggcaca 4980
gaatgggaca gagataaacc agacagtcat tttgatctgc tctctacggt ttttcaagtc 5040
agaggcaatt gatgcttgtc taatgcatcc acacactgca tgtctgactg gcgatgccac 5100
gctcctaagt agttctgcca tgaaacataa aagacaaagg aaaagccgtt acacatcaca 5160
cagagaacat tttcgggtcc cacagcggtg gtggcaggaa gctcactctc gcgtcagtat 5220
tagagtgtgt gtgtgggtct cggggatctc ggtggctccc atcttccttc attgttctga 5280
acatcctgta ttgtaaacca tggctggggt gctaaagtgc ctgtgaatcc cgatgtggaa 5340
aaagctggag gtgaaagctc agcataccat gtatttactt taaaaacaga aaaaaagaca 5400
tgtatggata tgtctatttt ttttttattg gcacattgta tttttgtgtt gacttgtttt 5460
tagaaatgat gtgtccacac acgtacccgt gtctcttctg catttctgtg tcatggttct 5520
gtttcttaat cacgtgcggc ggtgtctaag tggtgttacc agtgtacgcg cagtgacctt 5580
ggatgacagt ggctctttct cacagcctcc cctgagctgt gagaaacagc tttctctgta 5640
catatgcaac tcctaataaa aggcatattt cttcctgtta aaaaaaaaa 5689

<210> 21
<211> 249
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2582063H1

<400> 21
cagcggtggt ggcaggaagc tcactctcgc gtcagtatta gagtgtgtgt gtgggtctcg 60
gggatctcgg tggctcccat cttccttcat tgttctgaac atcctgtatt gtaaaccatg 120
gctggggtgc taaagtgcct gtgaatcccg atgtggaaaa agctggaggt gaaagctcag 180
cataccatgt atttacttta aaaacagaaa aaaagacatg tatggatatg tctatttttt 240
ttttattgg 249

<210> 22
<211> 549
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 7246093H1

<400> 22
cccgggtggt cgtgccgtgc ggggacggcc acatgaaagt tttcagcctc atccagcagg 60
cggtgacccg ctaccggaag gccatcgcca aggatccaaa ctactggata caggtgcatc 120
gcttggaaca tggagatgga ggaatactag accttgatga cattctttgt gatgtagcag 180
acgataaaga cagactggta gcagtgtttg atgagcagga tccacatcac ggaggtgatg 240
gcaccagtgc cagttccacg ggtacccaga gcccagagat atttggtagt gagcttggca 300
ccaacaatgt ctcagccttt cagccttacc aagcaacaag tgaaattgag gtcacacctt 360
cagtccttcg agcaaatatg cctcttcatg ttcgacgcag tagtgaccca gctctaattg 420
gcctctccac ttctgtcagt gatagtaatt tttcctctga agagccttca aggaaaaatc 480
ccacacgctg gtcaacaaca gctggcttcc tcaagcagaa cactgctggg agtcctaaaa 540
cctgcgaca 549

<210> 23
<211> 502

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 7978420H1

<400> 23
ggggagccca gagatatttg gtagtgagct tggcaccaac aatgtctcag cctttcagcc 60
ttaccaagca acaagtgaaa ttgaggtcac accttcagtc cttcgagcaa atatgcctct 120
tcatgttcga cgcagtagtg acccagctct aattggcctc tccacttctg tcagtgatag 180
taatttttcc tctgaagagc cttcaaggaa aaatcccaca cgctggtcaa caacagctgg 240
cttcctcaag cagaacactg ctgggagtcc taaaacctgc gacaggaaga aagatgaaaa 300
ctacagaagc ctcccgcggg atactagtaa ctggtctaac caatttcaga gagacaatgc 360
tcgctcgtct ctgagtgcca gtcacccaat ggtgggcaag tggctggaga aacaagaaca 420
ggatgaggat gggacagaag aggataacag tcgtgttgaa cctgttggac atgctgacac 480
gggtttggag catataccca ac 502

<210> 24
<211> 611
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 55040412H1

<400> 24
gctgtgcatg aagacgggac agaagaggat aacagtcgtg ttgaacctgt tggacatgct 60
gacacgggtt tggagcatat acccaacttt tctctggatg atatggtaaa gctcgcagaa 120
gtccccaacg atggagggcc tctgggaatc catgtagtgc ctttcagtgc tcgaggcggc 180
agaaccctgg ggttattagt aaaacgattg gagaaaggtg gtaaagctga acatgaaaat 240
ctttttcgtg agaatgattg cattgtcagg attaatgatg gcgaccttcg aaatagaaga 300
tttgaacaag cacaacatat gtttcgccaa gccatgcgta cacccatcat ttggttccat 360
gtggttcctg cagcaaataa agagcagtat gaacaactat cccaaagtga gaagaacaat 420
tactattcaa gccgttttag ccctgacagc cagtatattg acaacaggag tgtgaacagt 480
gcagggctgc acacggtgca gagagcaccc cgactgaacc acccgcctga gcagatagac 540
tctcactcaa gactacctca tagcgcacac ccctcgggaa aaccaccatc cgctccatcc 600
tcatggacag c 611

<210> 25
<211> 462
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2929484F6

<220>
<221> unsure
<222> 405, 441
<223> a, t, c, g, or other

<400> 25
gagcaccccg actgaaccac ccgcctgagc agatagactc tcactcaaga ctacctcata 60

gcgcacaccc ctcgggaaaa ccaccatccg ctccagcctc ggcacctcag aatgtattta 120
gtacgactgt aagcagtggt tataacacca aaaaaatagg caagaggctt aatatccagc 180
ttaagaaagg tacagaaggt ttgggattca gcatcacttc cagagatgta acaataggtg 240
gctcagctcc aatctatgtg aaaaacattc tcccccgggg ggcggccatt caggatggcc 300
gacttaaggc aggagacaga cttatagagg taaatggagt agatttagtg ggccaatccc 360
aagaggaagt tgtttcgctg ttgagaagca ccaagatgga aggantgtga gcttctggtc 420
tttcgccagg aagacgcttc nacccaaggg aactgaatgc ag 462

<210> 26
<211> 375
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 5627320R8

<400> 26
acactgcgtg gttctctttt gaccggttac ctttgacact gacaccaagg cctgcagatc 60
ctgaatcatt aagtgggact tcaaatgtca gaaattccct ggtgccatca ggtgtaagaa 120
caatatcctc atcttctgct ttcgtttctt ttggaatctg catctggctt ggatctgcat 180
tcagttccct tgggtggaag gcgtcttcct ggcgaaagac cagaaggctc acagttcctt 240
ccatcttggt gcttctcaac agcgaaacaa cttcctcttg ggatttgccc actaaatcta 300
ctccatttac ctctataagt ctgtctcctg acttaagtcg gccatcctga atggccgccc 360
ccgggggaga atgtt 375

<210> 27
<211> 543
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 3209128F6

<400> 27
cgccttccac ccaagggaac tgaaagcaga agatgaggat attgttctta cacctgatgg 60
caccaggaaa tttctgacat ttgaagtccc acttaatgat tcaggatctg caggccttgg 120
tgtcagtgtc aaaggtaacc ggtcaaaaga gaaccacgca gatttgggaa tctttgtcaa 180
gtccattatt aatggaggag cagcatctaa agatggaagg cttcgggtga atgatcaact 240
gatagcagta aatggagaat ccctgttggg caagacaaac caagatgcca tggaaaccct 300
aagaaggtct atgtctactg aaggcaataa acgaggaatg atccagctta ttgttgcaag 360
gagaataagc aagtgcaatg agctgaagtc acctgggagc ccccctggac ctgagctgcc 420
cattgaaaca gcgttggatg atagagaacg aagaatttcc cattccctct acagtgggat 480
tgaggggctt gatgaatcgg ccagcagaaa tgctggcctc agtaggataa tgggtgagtc 540
agg 543

<210> 28
<211> 220
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 349248H1

<220>
<221> unsure
<222> 167
<223> a, t, c, g, or other

<400> 28
aatatgcccc aagatgacac tgtcattata gaagatgaca ggttgccagt gcttcctcca 60
catctctctg accagtcctc ttccagctcc catgatgatg tggggtttgt gacggcagat 120
gctggtactt gggccaaggc tgcaatcagt gattcagccg actgctnttt gagtccagat 180
gttgatccag ttcttgcttt tcaacgagaa ggatttggac 220

<210> 29
<211> 613
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 7019961H1

<400> 29
gtgcttcctc cacatctctc tgaccagtcc tcttccagct cccatgatga tgtggggttt 60
gtgacggcag atgctggtac ttgggccaag gctgcaatca gtgattcagc cgactgctct 120
ttgagtccag atgttgatcc agttcttgct tttcaacgag aaggatttgg acgtcagagt 180
atgtcagaaa aacgcacaaa gcaattttca gatgccagtc aattggattt cgttaaaaca 240
cgaaaatcaa aaagcatgga tttaggtata gctgacgaga ctaaactcaa tacagtggat 300
gaccagaaag caggttctcc cagcagagat gtgggtcctt ccctgggtct gaagaagtca 360
agctcgttgg agagtctgca gaccgcagtt gccgaggtga ctttgaatgg ggatattcct 420
ttccatcgtc cacggccgcg gataatcaga ggcaggggat gcaatgagag cttcagagct 480
gccatcgaca aatcttatga taaacccgcg gtagatgatg atgatgaagg catggagacc 540
ttggaagaag acacagaaga cagttcacga tcagggagag agtctgtatc cacagccagg 600
atcaggcttc cac 613

<210> 30
<211> 249
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 6303175H2

<400> 30
tcgcgatcta gaacaaagaa aagaagaaag atagagataa ggagaaggat aaaatgatag 60
ccaagaaggg aatgctgaag ggcttgggag acatgttcag gtttggcaaa catcgaaaag 120
atgacaagat tgagaaaacg ggtaaaataa aaatacagga atcctttaca tcagaagagg 180
agaggatacg aatgaagcag gagcaggaga ggattcaagc caaaactcga gaatttaggg 240
aacgacaag 249

<210> 31
<211> 501
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<223> Incyte ID No: 2549906F6

<220>
<221> unsure
<222> 137, 164, 463
<223> a, t, c, g, or other

<400> 31
aggagaagga taaaatgaaa gccaagaagg gaatgctgaa gggcttggga gacatgttca 60
ggtttggcaa acatcgaaaa gatgacaaga ttgagaaaac gggtaaaata aaaatacagg 120
aatcctttac atcagangag gagaggatac gaatgaagca ggancaggag aggattcaag 180
ccaaaactcg agaatttagg gaacgacaag ctcgagagcg tgactatgct gaaattcaag 240
attttcatcg gacatttggc tgtgatgatg agttaatgta tgggggagtt tcttcttatg 300
aaggttccat ggctctcaac gctagacctc agagcccacg agaagggcat atgatggatg 360
ctttgtatgc ccaagtcaag aagccgcgga attccaaacc ctcacctgta gacagtaaca 420
gatcaactcc tagcaatcat gatcggatac agcgtctgag gcnagaattt cagcaagcaa 480
agcaagatga agatgtagaa g 501

<210> 32
<211> 265
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1945452H1

<400> 32
gttccatggc tctcaacgct agacctcaga gcccacgaga agggcatatg atggatgctt 60
tgtatgccca agtcaagaag ccgcggaatt ccaaaccctc acctgtagac agtaacagat 120
caactcctag caatcatgat cggatacagc gtctgaggca agaatttcag caagcaaagc 180
aagatgaaga tgtagaagat cgtcggcgga cctatagttt tgagcaaccc tggccgaacg 240
cacggccggc gacgcagagc gggcg 265

<210> 33
<211> 469
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2549906T6

<220>
<221> unsure
<222> 77, 194, 196, 441, 466
<223> a, t, c, g, or other

<400> 33
gttatttgcg tgctcaggaa tagaagggcc tccctttctc aggagtctga agtctgttca 60
gcctcgcaac ctgagagggg gaggggggca catcttgccg gaagggcccc ttgggagggg 120
cgtaactggg gtcctggact ttcttatacg agtcatagtt gctgggcccc tcggaaggag 180
gctgcttctt catnanctgc tccttccgcc tctgttcctg gcgaaggagc tcctgagttt 240
ccagcatgac cctggcgttg aagccatgtc ctcccaggta gccgttcctg gagccttggt 300
agctggagta cctggggttc tctttggcac tctggaagcc ttccccaggg gagtagttct 360
gctcccaaga gtcctgggag accgagctgg catttttcct gctttgccga ggcagagagc 420

tgtactggcg ctgggcctgt ngggagtctc gcgctcctcc tgccgntgc 469

<210> 34
<211> 558
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 71009002V1

<400> 34
caggcccagc gccagtacag ctctctgcct cggcaaagca ggaaaaatgc cagctcggtc 60
tcccaggact cttgggagca gaactactcc cctggggaag gcttccagag tgccaaagag 120
aaccccaggt actccagcta ccaaggctcc aggaacggct acctgggagg acatggcttc 180
aacgccaggt catgctggaa actcaggagc tccttcgcca ggaacagagg cggaaggagc 240
agcagatgaa gaagcagcct ccttccgagg ggcccagcaa ctatgactcg tataagaaag 300
tccaggaccc cagttacgcc cctcccaagg ggcccttccg gcaagatgtg ccccccctccc 360
cttctcaggt tgcgaggctg aacagacttc agactcctga gaaagggagg cccttctatt 420
cctgagcacg caaataacgg atgcttcatg tcgcgcaata aaagacattt tcctatgaag 480
acttgtattc cgggagtttt ttaaaaacct cgatggtact atggagtata ctggtcgtgg 540
tatcagtgcc tttaagcg 558

<210> 35
<211> 632
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 71008521V1

<220>
<221> unsure
<222> 605
<223> a, t, c, g, or other

<400> 35
ttccccacac agagctgtgg tgactcaacc cacgtgtcag gaacaggacc gaacaagcgt 60
atgtataaac gcagaccagg atcatcactt tattggtaat gttgagtcat aaggcagtta 120
caaaaggacc cccatggtga ccaaacaatg ttggactatg gcttagcttc tgtaatagga 180
tgaccgactc tcccgtcaca aagagctgag aaaggaaaga gaaaaccaca gtgatgacaa 240
agtacgacaa atggctgtgc tgtgaagtac cagaaagccc caatttttgg tgtatgtcgc 300
ccacttttcc tccaccagag actaagatgt catcccatag ctaagagaac ttagagggag 360
aaacagggcc gcacgtcatc ctccacttca ggtgaatttg tcactgcaag tggtgcaggg 420
atgttacaac caagccgcgg acaactcatg agtagggccg agattcctgg tactgtggag 480
aggcgcagag catatgaaca cctcaaacag atgattgtca cagggtggga aatccttcca 540
tgaaacagac acttgagaca tagtggcaaa gacattaagg ccttccattt ctttgcctac 600
accgnttaaa ggcactgata ccaacaacag aa 632

<210> 36
<211> 646
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<223> Incyte ID No: 71010168V1

<400> 36
cttcctagga gaatttcttt cttagctctc ccctcatgat agacacaggg ccaatggcag 60
gcccagcttc ccccggcagg agccactcct gtctcccacg ttccccacac agagctgtgg 120
tgactcaacc cacgtgtcag gaacaggacc gaacaagcgt atgtataaac gcagaccagg 180
atcatcactt tattggtaat gttgagtcat aaggcagtta caaaaggacc cccatggtga 240
ccaaacaatg ttggactatg gcttagcttc tgtaatagga tgaccgactc tcccgtcaca 300
aagagctgag aaaggaaaga gaaaaccaca gtgatgacaa agtacgacaa atggctgtgc 360
tggtgaagta ccagaaagcc ccaatttttg gtgtatgtcg cccacttttc ctccaccaga 420
gactaagatg tcatcccata gctaagagaa cttagaggga gaaacagggc cgcacgtcat 480
cctccacttc aggtgaattt gtcactgcaa gtggtgcagg gatgttacaa ccaagccgcg 540
gacaactcat gagtagggcc gagattcctg gtactgtgga gaggcgcaga gcatatgaac 600
acctcaaaca gatgatgtcc cagggtggga aatccttcca tgaaac 646

<210> 37
<211> 498
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 70090181V1

<400> 37
agctttcacc tccagctttt tccacatcgg gattcacagg caatttagca ccccagccat 60
ggtttacaat acaggatgtt cagaacaatg aaggaagatg ggagccaccg agatccccga 120
gacccacaca cacactctaa tactgacgcg agagtgagct tcctgccacc accgctgtgg 180
gacccgaaaa tgttctctgt gtgatgtgta acggcttttc ctttgtcttt tatgtttcat 240
ggcagaacta cttaggagcg tggcatcgcc agtcagacat gcagtgtgtg gatgcattag 300
acaagcatca attgcctctg acttgaaaaa ccgtagagag cagatcaaaa tgactgtctg 360
gtttatctct gtcccattct gtgcccttcc tgacaagctg tcagaacaaa aactaattaa 420
aataattact aggatgtact gggccatgag ctcttcctag gagaaattct ttcttagctc 480
tcccctcatg atagacac 498

<210> 38
<211> 572
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 6833928H1

<400> 38
cttgtcagga agggcacaga atgggacaga gataaaccag acagtcattt gatctgctct 60
ctacggtttt tcaagtcaga ggcaattgat gcttgtctaa tgcatccaca cactgcatgt 120
ctgactggcg atgccacgct cctaagtagt tctgccatga aacataaaag acaaaggaaa 180
agccgttaca catcacacag agaacatttt cgggtcccac agcggtggtg gcaggaagct 240
cactctcgcg tcagtattag agtgtgtgtg tgggtctcgg ggatctcggt ggctcccatc 300
ttccttcatt gttctgaaca tcctgtattg taaaccatgg ctggggtgct aaagtgcctg 360
tgaatcccga tgtggaaaaa gctggaggtg aaagctcagc ataccatgta tttactttaa 420
aaacagaaaa aaagacatgt atggatatgt ctatttttt tttatgggca catggtattt 480
ttgtgtggac ttgtttttag aaatgatgtg tccacacacg tacccgtgtc tcttctgcat 540
ttctgtgtca tggctctggt tcttaatcac gt 572

<210> 39
<211> 550
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 70089663V1

<400> 39
gctcataagt agttctgcca tgaaacataa aagacaaagg aaaagccgtt acacatcaca 60
cagagaacat tttcgggtcc cacagcggtg gtggcaggaa gctcactctc gcgtcagtat 120
tagagtgtgt gtgtgggtct cggggatctc ggtggctccc atcttccttc attgttctga 180
acatcctgta ttgtaaacca tggctggggt gctaaagtgc ctgtgaatcc cgatgtggaa 240
aaagctggag gtgaaagctc agcataccat gtatttactt taaaaacaga aaaaaagaca 300
tgtatggata tgtctatttt ttttttattg gcacattgta tttttgtgtt gacttgtttt 360
tagaaatgat gtgtccacac acgtacccgt gtctcttctg catttctgtg tcatggttct 420
gtttcttaat cacgtgcggc ggtgtctaag tggtgttacc agtgtacgcg cagtgacctt 480
ggatgacagt ggctcttgct cacagcctcc cctgagctgt gagacacagc tttctctgta 540
catatgcaac 550

<210> 40
<211> 514
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<223> Incyte ID No: 702231139H1

<400> 40
aagcaatttt caaatgccag tcaattggat ttcgttaaaa cacgaaaatc aaaaagcatg 60
gatttaggta tagctgacga gaactaaact caatacagtg gatgaccaga gagcaggctc 120
ccccaataga gatgtgggac cctccttggg tctgaagaaa tccagctctt tagaaagtct 180
gcagacggct gttgctgagg tgaccctgaa tgggaacatt cctttccacc gcccacggcc 240
acgaatcatc cgaggaaggg gctgcaacga gagcttcaga gccgccattg acaagtccta 300
cgataagccc atggtggatg acgacgacga aggcatggag accttggaag aagacacaga 360
agaaagttca aggtcaggga gggagtccgt gtccacgtcc agtgatcagc cttcctattc 420
tctggagaga caaatgaatg gagacccaga gaagagggac aaggcagaga agaaaaagga 480
caaagccgga aaggataaga agaaagaccg agag 514

<210> 41
<211> 544
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<223> Incyte ID No: 700273304F6

<400> 41
cctgaatggg aacattcctt tccaccgccc acggccacga atcatccgag gaaggggctg 60
caacgagagc ttcagagccg ccattgacaa gtcctacgat aagcccatgg tggatgacga 120
cgacgaaggc atggagacct tggaagaaga cacagaagaa agttcaaggt cagggaggga 180
gtccgtgtcc acgtccagtg atcagccttc ctattctctg gagagacaaa tgaatggaga 240
cccagagaag agggacaagg cagagaagaa aaaggacaaa gccggaaagg ataagaagaa 300

agaccgagag aaggagaagg ataaactgaa agccaagaag gggatgctga aaggcttggg 360
ggacatgttc agcctggcca aactgaagcc ggagaagaga tgaacagcat gccagactca 420
aactgtcttg gacagcacaa gttgcacaat tgtttttaa aagcacggtg tctgggctgt 480
ggctcagtct agagtgcctg cctggtgtac acaaagccgt gggctcaatc cccagcaccc 540
tata 544

<210> 42
<211> 272
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<223> Incyte ID No: 700330856H1

<400> 42
tagattcagc gggcaagtcc caggaggaag ttgtttccct gttgagaagc accaagatgg 60
aggggaccgt gagccttctg gtctttcgtc aagaagaggc tttccagcca agggaaatga 120
atgccgaacc cagccagatg cagagtccaa aagaaacgaa agccgaagac gaggacattg 180
ttctcacacc tgacggtacc agggagtttc tgactttcga agttccactg aatgactcag 240
ggtctgcagg gcttggtgtc agcgtcaagg gg 272

<210> 43
<211> 300
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<223> Incyte ID No: 700273304H1

<400> 43
actgaatggg aacattcctt tccaccgccc acggccacga atcatccgag gaaggggctg 60
caacgagagc ttcagagccg ccattgacaa gtcctacgat aagcccatgg tggatgacga 120
cgacgaaggc atggagacct tggaagaaga cacagaagaa agttcaaggt cagggaggga 180
gtccgtgtcc acgtccagtg atcagccttc ctattctctg gagagacaaa tgaatggaga 240
cccagagaag agggacaagg cagagaagaa aaaggacaaa gccggaaagg ataagaagaa 300

<210> 44
<211> 300
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<223> Incyte ID No: 701517518H1

<400> 44
caggatctca cactccctct acagtgggat cgaggggctg gatgagtctc ccaccaggaa 60
tgccgcactc agcaggataa tgggtaaatg ccagctctcc ccaaccgtga acatgccaca 120
tgatgacact gtcatgattg aagatgacag gctgcctgtg ctccctcctc acctctctga 180
ccagtcctcc tccagctccc atgatgacgt gggattcata atgacagaag caggcacgtg 240
ggccaaggct accatcagtg actcagccga ctgctcattg actccagatg ttgatccggt 300

<210> 45
<211> 544

<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<223> Incyte ID No: 701834089T1

<220>
<221> unsure
<222> 11-12, 17, 130-191
<223> a, t, c, g, or other

<400> 45
aaacctgagt nnccttnaca acccaaagta aatttattgt ttggatttta aaaaaacttt 60
ctttgagaca cgtttcgtgt atcccaggct ggcctcgaac actacgtatg caggatgacc 120
ttgaacttcn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn ntatagggtg ctggggattg agcccacggc tttgtgtaca ccaggcaggc 240
actctagact gagccacagc ccagacaccg tgcttttaaa aaacaattgt gcaacttgtg 300
ctgtccaaga cagtttgagt ctggcatgct gttcatctct tctccggctt cagtttggcc 360
aggctgaaca tgtcccccaa gcctttcagc atccccttct tggctttcag tttatccttc 420
tccttctctc ggtctttctt cttatccttt ccggctttgt ccttttttctt ctctgccttg 480
tccctcttct ctgggtctcc attcatttgt ctctccagag aataggaagg ctgatcactg 540
gacg 544

<210> 46
<211> 196
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<223> Incyte ID No: 701480437H1

<400> 46
ctctctctct ctcatccttg actgactaac ttctttgctt tattgccaga caaagcagga 60
agaatgccag ctctgtatca caggattcct gggaacagaa ctacgcccct ggtgaaggct 120
tccagagtgc caaggagaac cccaggtatt ccagttacca gggctccagg aacggctatc 180
taggtggcca tggctt 196

<210> 47
<211> 273
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<223> Incyte ID No: 701190235H1

<400> 47
gcagatgtaa cgagttgcgg tctcctggga gccccgctgc acccgatctg cccatacaaa 60
cagagttgga tgacagacaa cgcaggatct cacactccct ctacagtggg atcgatgggc 120
tggatgagtc tcccaccagg aatgccgcac tcagcaggat aatgggtaaa tgccagctct 180
ccccaaccgt gaacatgcta catgatgaca ctgtcatgat tgaagatgac aggctgcctg 240
tgctcactcc tcacctctct gaccagtcct cct 273

<210> 48

<211> 248
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<223> Incyte ID No: 700939688H1

<400> 48
cagagaagag ggacaaggca gagaagaaaa aggacaaagc cggaaaggat aagaagaaag 60
accgagagaa ggagaaggat aaactgaaag ccaagaaggg gatgctgaaa ggcttggggg 120
acatgttcag cctggccaaa ctgaagccgg agaagagatg aacagcatgc cagactcaaa 180
ctgtcttgga cagcacaagt tgcacaattg ttttttaaaa gcacggtgtc tgggctgtgg 240
ctcagtct 248

<210> 49
<211> 351
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<223> Incyte ID No: 700939688F6

<220>
<221> unsure
<222> 337
<223> a, t, c, g, or other

<400> 49
cagagaagag ggacaaggca gagaagaaaa aggacaaagc cggaaaggat aagaagaaag 60
accgagagaa ggagaaggat aaactgaaag ccaagaaggg gatgctgaaa ggcttggggg 120
acatgttcag cctggccaaa ctgaagccgg agaagagatg aacagcatgc cagactcaaa 180
ctgtcttgga cagcacaagt tgcacaattg ttttttaaaa gcacggtgtc tgggctgtgg 240
ctcagtctag aagatgcctg cctggctgta cacaagagcc agtggagctc aagtccccag 300
acagccctat agaaccagcg tgtggtagac acatgcnctg tcatcccagc a 351

<210> 50
<211> 571
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<223> Incyte ID No: 702582937T1

<400> 50
cactttagca acccagcctt ggtttacaat acaggatgtt cagaccaaca gatgaacggc 60
gggaacacgg agggcctcgt gccacaggca tgcacggaga atgggactcc cggtgctcag 120
agggacatcg acaggtcctc gagtgggatg gctctccttc tgtttgtgaa taaacagcag 180
agtcactcag taatgttggc ctcgtcaggt cgggacatgg tatgaggata taggagacca 240
aatcctgact gcaacctcaa aagctgtgtt gaggttgatt ctcagaatcc caagtgactg 300
acctttttcc ttgatcccac tctgtgcctc ccttgacaac ctacggtgac acgaagtaaa 360
gtaaggactg gatagaccgg cctaagctcc tccagagagt cttccctcag actcctatct 420
ccttcctcgg ggtgcgtaca catgggccac tcccatgccc cttgttcccg agtgtcatga 480
gtgactgaaa ctgaacgcat gtacttatag aaccactgac tagaaatcgg ctgtagatat 540

gggtgggtgg agttataaag ggcagttgga a 571

<210> 51
<211> 694
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<223> Incyte ID No: 700299037F6

<400> 51
ctctagggtg gtagtgaaga agctaagcca taggccagtg ccgttggttc tgggggtga 60
gggtaacttt ccaactgcct tataactcca ccacccatat cacagcgatt ctagtcagtg 120
tttataagta catgcgttca gtttcagtca ctcatgacac tcgggaacaa ggggcatggg 180
agtggcccat gtgtacgcac cccgaggaag gagataggag ctgagggaag actctctgga 240
ggagcttagg ccggtctatc cagtccttac tttacttcgt gtcaccgtag gttgtcaagg 300
gaggcacaga gtgggacaag gaaaaaggtc agtcacttgg gattctgaga atcaacctca 360
acacagcttt tgaggttgca gtcaggattg gtctcctata tcctcatacc atgtcccgac 420
ctgacgaggc caacattact gagtgactct gctgtttatt cacaaacaga aggagagcca 480
tcccactcga ggacctgtcg atgtccctct gagcaccggg agtcccattc tccgtgcatg 540
cctgtggcac gaggcctccg tgttcccgcc gttcatctgt tggtctgaac atcctgtatg 600
taaaccaagg ctgggttgct aaagtgcctg agaatctcga tataaaaaac aaaaaacaaa 660
aaaatccttg gggcaaaagc tcagagtacc atgt 694

<210> 52
<211> 110
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<223> Incyte ID No: 701246488H1

<400> 52
gattgaagat gacaggctgc ctgtgctccc tcctgacctc tctgaccagg cgtcctccag 60
ctcccatgat gacgtgggat tcataatgac agaagcaggc acgtgggcca 110

<210> 53
<211> 578
<212> DNA
<213> Canis familiaris

<220>
<221> misc_feature
<223> Incyte ID No: 702759912H1

<400> 53
atgaaagtga ccgtgtgctt cgggcggacc cgggtggtcg tgccgtgcgg ggacgggcac 60
atgaaagttt tcagcctcat ccagcaagcg gtgacccgct accggaaggc catcgccaag 120
gatccaaact actggataca ggtgcaccga cttgaacatg gagatggagg aatactagac 180
cttgatgaca ccctctgtga tgtagcagat gataaagaca gactggtagc agtgtttgat 240
gagcaagatc cacatcatgg aggtgatggc accagtgcca gctccacagg tacccagagt 300
ccagagatat ttggcagtga gcttggcacc aacaatgttt cagcctttca gccttatcaa 360
gctacaagtg aaattgaggt cacaccttca gttcttcgtg caaatatgcc tcttcatgtc 420
cgacgaagca gtgacccggc tttaattggc ctttcaactt ccatcagtga cactaatttt 480

ccttctgaag agccttcacg gaagaacccc acacgttggt caacaacagc tggctttctg 540
aagcaaaaca ctgctggcag ccctaatact gtgacaaa 578

<210> 54
<211> 293
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<223> Incyte ID No: 700112340H1

<400> 54
gggcatttga ctgagatgtc ccaaaggtgc ctattggaag agcattatga tccaaactac 60
tggatacagg tgcatcgctt ggagcatgga gatggaggga ttctagacct ggatgacatc 120
ctctgtgacg ttgctgatga caaagacaga ctggtagcag tatttgatga acaggatccc 180
caccatggag gagatggtac cagcgccagc tccacgggaa cccagagtcc agagatattc 240
ggcagtgagc tgggcaccaa caatgtttct gcttttcagc cttatcaagc cac 293

<210> 55
<211> 233
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<223> Incyte ID No: 700827810H1

<400> 55
cgcggccggc atcgcagagt ggtcggcact cggtgtccgt ggaggttcaa gtacaacggc 60
agcgccagga ggagcgagag agcttccagc aggcccagcg ccagtacagc tcactgccaa 120
gacaaagcag gaagaatgcc agctccatat cacaggattc ctgggaacag aagagtgaag 180
aaatctttgg gcaagtatgg ccctagcagt gtagaagaca ccacaggaag tgg 233

<210> 56
<211> 222
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<223> Incyte ID No: 700109331H1

<400> 56
gggcatctca aatgcaagga aaactaatct ttttgccaaa ttgacacttt gtaaatttat 60
tttctctatt gctaaaaata aaatagacat gtgtttggga ccctgagtct catcccgaag 120
catccgaacc ttactcaaag aatcatggag attgtactca ctacctaaat ccatgctttt 180
tgattttcgt gttttaacga aatccaattg actggcatct ga 222

<210> 57
<211> 369
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<223> Incyte ID No: g6661750

<400> 57
aaggggcgct gccgcgagcc tccgggcctc agggtgttcc ggggagcggc gccccgggtc 60
tctgggccca cccgccccgg gcgtcctccg agagtggggg ctgcgcccgc ggggtcagac 120
acctgttcgg cccggcccgg cgtggtcgcc gggggccagg atgaaagtga ccgtgtgctt 180
cggcaggacg ggcatcgtgg tgccctgcaa ggagggccag ctgcgcgtcg gcgagctcac 240
ccagcaggcg ctgcagcggt acctgaagac ccgggagaag ggtcctggtt actgggtgaa 300
gattcatcac ttagaatata cagatggagg aatcctggat ccagatgatg tcttggcaga 360
tgttgttga 369

<210> 58
<211> 511
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: GNN.g10801482_004.edit

<400> 58
gccccggccg cacatggttc gaggccgagg ctgcaatgag agctttagag cagccattga 60
caaatcctac gatggacctg aagaaataga agctgacggt ctgtctgata agagctctca 120
ctctggccaa ggagctctga attgtgagtc tgcccctcag gggaattcgg agctagagga 180
catggaaaat aaagccagga aagtcaaaaa aacgaaagag aaggagaaga aaaaggaaaa 240
gggcaaattg aaagtcaagg agaaaaagcg caaagaggag aatgaagatc cagaaaggaa 300
aataaagaag aagggcttcg gcgccatgct gaggtatggg cctgctttga aggcaaagtt 360
ggttctcatt ttgtctctcc tgaaaaaagc gcacgctttt cctcgtcttc agccaaatgc 420
atacggctct caattctgtg ctcgttctct ttctgcagag gcagaggagc tttttgggga 480
aagttacagt gatgacagga cactgtctta a 511

<210> 59
<211> 591
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: g6993427

<400> 59
ccagttttat cctttttttct atcagtctta tcacctttct cttggtttcc attcatttgt 60
ctctccagag agtgggaagg ctgatcactg gctgtggata cagactctct ccctgatctt 120
gaactttctt ctgtgtcttc ttccaaggtc tccatgcctt catcatcatc atctaccacg 180
ggtttatcat aagatttgtc gatggcagct ctgaagctct cattgcatcc cctgcctctg 240
attatccgcg gccgtggacg atggaaagga atatccccat tcaaagtcac ctcggcaact 300
gcggtctgca gactctccaa cgagcttgac ttcttcagac ccagggaagg acccacatct 360
ctgctgggag aacctgcttt ctggtcatcc actgtattga gtttagtctc gtcagctata 420
cctaaatcca tgctttttga ttttcgtgtt ttaacgaaat ccaattgact ggcatctgaa 480
aattgctttg tgcgtttttc tgacatactc tgacgtccaa atccttctcg ttgaaaagca 540
agaactggat caacatctgg actcaaagag cagtcgggtg aatcactgat t 591

<210> 60
<211> 389
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: g5529915

<400> 60
tttttttca gttttatcct tttttctatc agtcttatca cctttctctt ggtttccatt 60
catttgtctc tccagagagt gggaaggctg atcactggct gtggatacag actctctccc 120
tgatcttgaa ctttcttctg tgtcttcttc caaggtctcc atgccttcat catcatcatc 180
taccgcgggt ttatcataag atttgtcgat ggcagctctg aagctctcat tgcatccccc 240
gcctctgatt atccgcggcc gtggacgatg gaaaggaata tccccattca aagtcacctc 300
ggcaactgcg gtctgcagac tctccaacga gcttgacttc ttcagaccca gggaaggacc 360
cacatctctg ctgggagaac ctgctttct 389

<210> 61
<211> 367
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: g1733437

<400> 61
ggaaaccaag agaaaggtga taagactgat agaaaaaagg ataaaactgg aaaagaaaag 60
aagaaagata gagataagga gaaggataaa atgaaagcca agaagggaat gctgaagggc 120
ttgggagaca tgttcaggtt tggcaaacat cgaaaagatg acaagattga gaaaacgggt 180
aaaataaaaa tacaggaatc ctttacatca gaagaggaga ggatacgaat gaagcaggag 240
caggagagga ttcaagccaa aactcgagaa tttagggaac cgacaagctc gagagcgtga 300
ctatgctgaa attcaagatt ttcatcggac atttggctgt gatgatgagt taatgtatgg 360
gggagtt 367

<210> 62
<211> 1337
<212> PRT
<213> Rattus norvegicus

<220>
<221> misc_feature
<223> Incyte ID No: g3868778

<400> 62
Met Lys Val Thr Val Cys Phe Gly Arg Thr Arg Val Val Val Pro
1 5 10 15
Cys Gly Asp Gly Arg Met Lys Val Phe Ser Leu Ile Gln Gln Ala
20 25 30
Val Thr Arg Tyr Arg Lys Ala Val Ala Lys Asp Pro Asn Tyr Trp
35 40 45
Ile Gln Val His Arg Leu Glu His Gly Asp Gly Gly Ile Leu Asp
50 55 60
Leu Asp Asp Ile Leu Cys Asp Val Ala Asp Asp Lys Asp Arg Leu
65 70 75
Val Ala Val Phe Asp Glu Gln Asp Pro His His Gly Gly Asp Gly
80 85 90
Thr Ser Ala Ser Ser Thr Gly Thr Gln Ser Pro Glu Ile Phe Gly
95 100 105
Ser Glu Leu Gly Thr Asn Asn Val Ser Ala Phe Arg Pro Tyr Gln

```
                110                 115                 120
Thr Thr Ser Glu Ile Glu Val Thr Pro Ser Val Leu Arg Ala Asn
                125                 130                 135
Met Pro Leu His Val Arg Arg Ser Ser Asp Pro Ala Leu Thr Gly
                140                 145                 150
Leu Ser Thr Ser Val Ser Asp Asn Asn Phe Ser Ser Glu Glu Pro
                155                 160                 165
Ser Arg Lys Asn Pro Thr Arg Trp Ser Thr Thr Ala Gly Phe Leu
                170                 175                 180
Lys Gln Asn Thr Thr Gly Ser Pro Lys Thr Cys Asp Arg Lys Lys
                185                 190                 195
Asp Glu Asn Tyr Arg Ser Leu Pro Arg Asp Pro Ser Ser Trp Ser
                200                 205                 210
Asn Gln Phe Gln Arg Asp Asn Ala Arg Ser Ser Leu Ser Ala Ser
                215                 220                 225
His Pro Met Val Asp Arg Trp Leu Glu Lys Gln Glu Gln Asp Glu
                230                 235                 240
Glu Gly Thr Glu Glu Asp Ser Ser Arg Val Glu Pro Val Gly His
                245                 250                 255
Ala Asp Thr Gly Leu Glu Asn Met Pro Asn Phe Ser Leu Asp Asp
                260                 265                 270
Met Val Lys Leu Val Gln Val Pro Asn Asp Gly Gly Pro Leu Gly
                275                 280                 285
Ile His Val Val Pro Phe Ser Ala Arg Gly Gly Arg Thr Leu Gly
                290                 295                 300
Leu Leu Val Lys Arg Leu Glu Lys Gly Gly Lys Ala Glu Gln Glu
                305                 310                 315
Asn Leu Phe His Glu Asn Asp Cys Ile Val Arg Ile Asn Asp Gly
                320                 325                 330
Asp Leu Arg Asn Arg Arg Phe Glu Gln Ala Gln His Met Phe Arg
                335                 340                 345
Gln Ala Met Arg Ala Arg Val Ile Trp Phe His Val Val Pro Ala
                350                 355                 360
Ala Asn Lys Glu Gln Tyr Glu Gln Leu Ser Gln Arg Glu Met Asn
                365                 370                 375
Asn Tyr Ser Pro Gly Arg Phe Ser Pro Asp Ser His Cys Val Ala
                380                 385                 390
Asn Arg Ser Val Ala Asn Asn Ala Pro Gln Ala Leu Pro Arg Ala
                395                 400                 405
Pro Arg Leu Ser Gln Pro Pro Glu Gln Leu Asp Ala His Pro Arg
                410                 415                 420
Leu Pro His Ser Ala His Ala Ser Thr Lys Pro Pro Thr Ala Pro
                425                 430                 435
Ala Leu Ala Pro Pro Asn Val Leu Ser Thr Ser Val Gly Ser Val
                440                 445                 450
Tyr Asn Thr Lys Arg Val Gly Lys Arg Leu Asn Ile Gln Leu Lys
                455                 460                 465
Lys Gly Thr Glu Gly Leu Gly Phe Ser Ile Thr Ser Arg Asp Val
                470                 475                 480
Thr Ile Gly Gly Ser Ala Pro Ile Tyr Val Lys Asn Ile Leu Pro
                485                 490                 495
Arg Gly Ala Ala Ile Gln Asp Gly Arg Leu Lys Ala Gly Asp Arg
                500                 505                 510
Leu Ile Glu Val Asn Gly Val Asp Leu Ala Gly Lys Ser Gln Glu
                515                 520                 525
Glu Val Val Ser Leu Leu Arg Ser Thr Lys Met Glu Gly Thr Val
```

```
                530                 535                 540
Ser Leu Leu Val Phe Arg Gln Glu Glu Ala Phe His Pro Arg Glu
                545                 550                 555
Met Asn Ala Glu Pro Ser Gln Met Gln Ser Pro Lys Glu Thr Lys
                560                 565                 570
Ala Glu Asp Glu Asp Ile Val Leu Thr Pro Asp Gly Thr Arg Glu
                575                 580                 585
Phe Leu Thr Phe Glu Val Pro Leu Asn Asp Ser Gly Ser Ala Gly
                590                 595                 600
Leu Gly Val Ser Val Lys Gly Asn Arg Ser Lys Glu Asn His Ala
                605                 610                 615
Asp Leu Gly Ile Phe Val Lys Ser Ile Ile Asn Gly Gly Ala Ala
                620                 625                 630
Ser Lys Asp Gly Arg Leu Arg Val Asn Asp Gln Leu Ile Ala Val
                635                 640                 645
Asn Gly Glu Ser Leu Leu Gly Lys Ala Asn Gln Glu Ala Met Glu
                650                 655                 660
Thr Leu Arg Arg Ser Met Ser Thr Glu Gly Asn Lys Arg Gly Met
                665                 670                 675
Ile Gln Leu Ile Val Ala Arg Arg Ile Ser Arg Cys Asn Glu Leu
                680                 685                 690
Arg Ser Pro Gly Ser Pro Ala Ala Pro Glu Leu Pro Ile Glu Thr
                695                 700                 705
Glu Leu Asp Asp Arg Glu Arg Arg Ile Ser His Ser Leu Tyr Ser
                710                 715                 720
Gly Ile Glu Gly Leu Asp Glu Ser Pro Thr Arg Asn Ala Ala Leu
                725                 730                 735
Ser Arg Ile Met Gly Glu Ser Gly Lys Cys Gln Leu Ser Pro Thr
                740                 745                 750
Val Asn Met Pro His Asp Asp Thr Val Met Ile Glu Asp Asp Arg
                755                 760                 765
Leu Pro Val Leu Pro Pro His Leu Ser Asp Gln Ser Ser Ser Ser
                770                 775                 780
Ser His Asp Asp Val Gly Phe Ile Met Thr Glu Ala Gly Thr Trp
                785                 790                 795
Ala Lys Ala Thr Ile Ser Asp Ser Ala Asp Cys Ser Leu Ser Pro
                800                 805                 810
Asp Val Asp Pro Val Leu Ala Phe Gln Arg Glu Gly Phe Gly Arg
                815                 820                 825
Gln Ser Met Ser Glu Lys Arg Thr Lys Gln Phe Ser Asn Ala Ser
                830                 835                 840
Gln Leu Asp Phe Val Lys Thr Arg Lys Ser Lys Ser Met Asp Leu
                845                 850                 855
Gly Ile Ala Asp Glu Thr Lys Leu Asn Thr Val Asp Asp Gln Arg
                860                 865                 870
Ala Gly Ser Pro Asn Arg Asp Val Gly Pro Ser Leu Gly Leu Lys
                875                 880                 885
Lys Ser Ser Ser Leu Glu Ser Leu Gln Thr Ala Val Ala Glu Val
                890                 895                 900
Thr Leu Asn Gly Asn Ile Pro Phe His Arg Pro Arg Pro Arg Ile
                905                 910                 915
Ile Arg Gly Arg Gly Cys Asn Glu Ser Phe Arg Ala Ala Ile Asp
                920                 925                 930
Lys Ser Tyr Asp Lys Pro Met Val Asp Asp Asp Asp Glu Gly Met
                935                 940                 945
Glu Thr Leu Glu Glu Asp Thr Glu Glu Ser Ser Arg Ser Gly Arg
```

```
                950                 955                 960
Glu Ser Val Ser Thr Ser Ser Asp Gln Pro Ser Tyr Ser Leu Glu
                965                 970                 975
Arg Gln Met Asn Gly Asp Pro Glu Lys Arg Asp Lys Ala Glu Lys
                980                 985                 990
Lys Lys Asp Lys Ala Gly Lys Asp Lys Lys Lys Asp Arg Glu Lys
                995                1000                1005
Glu Lys Asp Lys Leu Lys Ala Lys Lys Gly Met Leu Lys Gly Leu
               1010                1015                1020
Gly Asp Met Phe Arg Phe Gly Lys His Arg Lys Asp Asp Lys Met
               1025                1030                1035
Glu Lys Met Gly Arg Ile Lys Ile Gln Asp Ser Phe Thr Ser Glu
               1040                1045                1050
Glu Asp Arg Val Arg Met Lys Glu Glu Gln Glu Arg Ile Gln Ala
               1055                1060                1065
Lys Thr Arg Glu Phe Arg Glu Arg Gln Ala Arg Glu Arg Asp Tyr
               1070                1075                1080
Ala Glu Ile Gln Asp Phe His Arg Thr Phe Gly Cys Asp Asp Glu
               1085                1090                1095
Leu Leu Tyr Gly Gly Met Ser Ser Tyr Asp Gly Cys Leu Ala Leu
               1100                1105                1110
Asn Ala Arg Pro Gln Ser Pro Arg Glu Gly His Leu Met Asp Thr
               1115                1120                1125
Leu Tyr Ala Gln Val Lys Lys Pro Arg Ser Ser Lys Pro Gly Asp
               1130                1135                1140
Ser Asn Arg Ser Thr Pro Ser Asn His Asp Arg Ile Gln Arg Leu
               1145                1150                1155
Arg Gln Glu Phe Gln Gln Ala Lys Gln Asp Glu Asp Val Glu Asp
               1160                1165                1170
Arg Arg Arg Thr Tyr Ser Phe Glu Gln Ser Trp Ser Ser Ser Arg
               1175                1180                1185
Pro Ala Ser Gln Ser Gly Arg His Ser Val Ser Val Glu Val Gln
               1190                1195                1200
Val Gln Arg Gln Arg Gln Glu Glu Arg Glu Ser Phe Gln Gln Ala
               1205                1210                1215
Gln Arg Gln Tyr Ser Ser Leu Pro Arg Gln Ser Arg Lys Asn Ala
               1220                1225                1230
Ser Ser Val Ser Gln Asp Ser Trp Glu Gln Asn Tyr Ala Pro Gly
               1235                1240                1245
Glu Gly Phe Gln Ser Ala Lys Glu Asn Pro Arg Tyr Ser Ser Tyr
               1250                1255                1260
Gln Gly Ser Arg Asn Gly Tyr Leu Gly Gly His Gly Phe Asn Ala
               1265                1270                1275
Arg Val Met Leu Glu Thr Gln Glu Leu Leu Arg Gln Glu Gln Arg
               1280                1285                1290
Arg Lys Glu Gln Gln Leu Lys Lys Gln Pro Pro Ala Asp Gly Val
               1295                1300                1305
Arg Gly Pro Phe Arg Gln Asp Val Pro Pro Ser Pro Ser Gln Val
               1310                1315                1320
Ala Arg Leu Asn Arg Leu Gln Thr Pro Glu Lys Gly Arg Pro Phe
               1325                1330                1335
Tyr Ser
```

<210> 63
<211> 1266

PC-0032 US

<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: g8037915

<400> 63

```
Met Lys Val Thr Val Cys Phe Gly Arg Thr Arg Val Val Val Pro
  1               5                  10                  15
Cys Gly Asp Gly His Met Lys Val Phe Ser Leu Ile Gln Gln Ala
                 20                  25                  30
Val Thr Arg Tyr Arg Lys Ala Ile Ala Lys Asp Pro Asn Tyr Trp
                 35                  40                  45
Ile Gln Val His Arg Leu Glu His Gly Asp Gly Gly Ile Leu Asp
                 50                  55                  60
Leu Asp Asp Ile Leu Cys Asp Val Ala Asp Asp Lys Asp Arg Leu
                 65                  70                  75
Val Ala Val Phe Asp Glu Gln Asp Pro His His Gly Gly Asp Gly
                 80                  85                  90
Thr Ser Ala Ser Ser Thr Gly Thr Gln Ser Pro Glu Ile Phe Gly
                 95                 100                 105
Ser Glu Leu Gly Thr Asn Asn Val Ser Ala Phe Gln Pro Tyr Gln
                110                 115                 120
Ala Thr Ser Glu Ile Glu Val Thr Pro Ser Val Leu Arg Ala Asn
                125                 130                 135
Met Pro Leu His Val Arg Arg Ser Ser Asp Pro Ala Leu Ile Gly
                140                 145                 150
Leu Ser Thr Ser Val Ser Asp Ser Asn Phe Ser Ser Glu Glu Pro
                155                 160                 165
Ser Arg Lys Asn Pro Thr Arg Trp Ser Thr Thr Ala Gly Phe Leu
                170                 175                 180
Lys Gln Asn Thr Ala Gly Ser Pro Lys Thr Cys Asp Arg Lys Asp
                185                 190                 195
Glu Asp Gly Thr Glu Glu Asp Asn Ser Arg Val Glu Pro Val Gly
                200                 205                 210
His Ala Asp Thr Gly Leu Glu His Ile Pro Asn Phe Ser Leu Asp
                215                 220                 225
Asp Met Val Lys Leu Val Glu Val Pro Asn Asp Gly Gly Pro Leu
                230                 235                 240
Gly Ile His Val Val Pro Phe Ser Ala Arg Gly Gly Arg Thr Leu
                245                 250                 255
Gly Leu Leu Val Lys Arg Leu Glu Lys Gly Gly Lys Ala Glu His
                260                 265                 270
Glu Asn Leu Phe Arg Glu Asn Asp Cys Ile Val Arg Ile Asn Asp
                275                 280                 285
Gly Asp Leu Arg Asn Arg Arg Phe Glu Gln Ala Gln His Met Phe
                290                 295                 300
Arg Gln Ala Met Arg Thr Pro Ile Ile Trp Phe His Val Val Pro
                305                 310                 315
Ala Ala Asn Lys Glu Gln Tyr Glu Gln Leu Ser Gln Ser Glu Lys
                320                 325                 330
Asn Asn Tyr Tyr Ser Ser Arg Phe Ser Pro Asp Ser Gln Tyr Ile
                335                 340                 345
Asp Asn Arg Ser Val Asn Ser Ala Gly Leu His Thr Val Gln Arg
                350                 355                 360
```

```
Ala Pro Arg Leu Asn His Pro Pro Glu Gln Ile Asp Ser His Ser
                365                 370                 375
Arg Leu Pro His Ser Ala His Pro Ser Gly Lys Pro Pro Ser Ala
                380                 385                 390
Pro Ala Ser Ala Pro Gln Asn Val Phe Ser Thr Thr Val Ser Ser
                395                 400                 405
Gly Tyr Asn Thr Lys Lys Ile Gly Lys Arg Leu Asn Ile Gln Leu
                410                 415                 420
Lys Lys Gly Thr Glu Gly Leu Gly Phe Ser Ile Thr Ser Arg Asp
                425                 430                 435
Val Thr Ile Gly Gly Ser Ala Pro Ile Tyr Val Lys Asn Ile Leu
                440                 445                 450
Pro Arg Gly Ala Ala Ile Gln Asp Gly Arg Leu Lys Ala Gly Asp
                455                 460                 465
Arg Leu Ile Glu Val Asn Gly Val Asp Leu Val Gly Lys Ser Gln
                470                 475                 480
Glu Glu Val Val Ser Leu Leu Arg Ser Thr Lys Met Glu Gly Thr
                485                 490                 495
Val Ser Leu Leu Val Phe Arg Gln Glu Asp Ala Phe His Pro Arg
                500                 505                 510
Glu Leu Lys Ala Glu Asp Glu Asp Ile Val Leu Thr Pro Asp Gly
                515                 520                 525
Thr Arg Glu Phe Leu Thr Phe Glu Val Pro Leu Asn Asp Ser Gly
                530                 535                 540
Ser Ala Gly Leu Gly Val Ser Val Lys Gly Asn Arg Ser Lys Glu
                545                 550                 555
Asn His Ala Asp Leu Gly Ile Phe Val Lys Ser Ile Ile Asn Gly
                560                 565                 570
Gly Ala Ala Ser Lys Asp Gly Arg Leu Arg Val Asn Asp Gln Leu
                575                 580                 585
Ile Ala Val Asn Gly Glu Ser Leu Leu Gly Lys Thr Asn Gln Asp
                590                 595                 600
Ala Met Glu Thr Leu Arg Arg Ser Met Ser Thr Glu Gly Asn Lys
                605                 610                 615
Arg Gly Met Ile Gln Leu Ile Val Ala Arg Arg Ile Ser Lys Cys
                620                 625                 630
Asn Glu Leu Lys Ser Pro Gly Ser Pro Pro Gly Pro Glu Leu Pro
                635                 640                 645
Ile Glu Thr Ala Leu Asp Asp Arg Glu Arg Arg Ile Ser His Ser
                650                 655                 660
Leu Tyr Ser Gly Ile Glu Gly Leu Asp Glu Ser Pro Ser Arg Asn
                665                 670                 675
Ala Ala Leu Ser Arg Ile Met Gly Lys Tyr Gln Leu Ser Pro Thr
                680                 685                 690
Val Asn Met Pro Gln Asp Asp Thr Val Ile Ile Glu Asp Asp Arg
                695                 700                 705
Leu Pro Val Leu Pro Pro His Leu Ser Asp Gln Ser Ser Ser Ser
                710                 715                 720
Ser His Asp Asp Val Gly Phe Val Thr Ala Asp Ala Gly Thr Trp
                725                 730                 735
Ala Lys Ala Ala Ile Ser Asp Ser Ala Asp Cys Ser Leu Ser Pro
                740                 745                 750
Asp Val Asp Pro Val Leu Ala Phe Gln Arg Glu Gly Phe Gly Arg
                755                 760                 765
Gln Ile Ala Asp Glu Thr Lys Leu Asn Thr Val Asp Asp Gln Lys
                770                 775                 780
```

```
Ala Gly Ser Pro Ser Arg Asp Val Gly Pro Ser Leu Gly Leu Lys
                785                 790                 795
Lys Ser Ser Ser Leu Glu Ser Leu Gln Thr Ala Val Ala Glu Val
                800                 805                 810
Thr Leu Asn Gly Asp Ile Pro Phe His Arg Pro Arg Pro Arg Ile
                815                 820                 825
Ile Arg Gly Arg Gly Cys Asn Glu Ser Phe Arg Ala Ala Ile Asp
                830                 835                 840
Lys Ser Tyr Asp Lys Pro Ala Val Asp Asp Asp Asp Glu Gly Met
                845                 850                 855
Glu Thr Leu Glu Glu Asp Thr Glu Glu Ser Ser Arg Ser Gly Arg
                860                 865                 870
Glu Ser Val Ser Thr Ala Ser Asp Gln Pro Ser His Ser Leu Glu
                875                 880                 885
Arg Gln Met Asn Gly Asn Gln Glu Lys Gly Asp Lys Thr Asp Arg
                890                 895                 900
Lys Lys Asp Lys Thr Gly Lys Glu Lys Lys Lys Asp Arg Asp Lys
                905                 910                 915
Glu Lys Asp Lys Met Lys Ala Lys Lys Gly Met Leu Lys Gly Leu
                920                 925                 930
Gly Asp Met Phe Arg Phe Gly Lys His Arg Lys Asp Asp Lys Ile
                935                 940                 945
Glu Lys Thr Gly Lys Ile Lys Ile Gln Glu Ser Phe Thr Ser Glu
                950                 955                 960
Glu Glu Arg Ile Arg Met Lys Gln Glu Gln Glu Arg Ile Gln Ala
                965                 970                 975
Lys Thr Arg Glu Phe Arg Glu Arg Gln Ala Arg Glu Arg Asp Tyr
                980                 985                 990
Ala Glu Ile Gln Asp Phe His Arg Thr Phe Gly Cys Asp Asp Glu
                995                1000                1005
Leu Met Tyr Gly Gly Val Ser Ser Tyr Glu Gly Ser Met Ala Leu
               1010                1015                1020
Asn Ala Arg Pro Gln Ser Pro Arg Glu Gly His Met Met Asp Ala
               1025                1030                1035
Leu Tyr Ala Gln Val Lys Lys Pro Arg Asn Ser Lys Pro Ser Pro
               1040                1045                1050
Val Asp Ser Asn Arg Ser Thr Pro Ser Asn His Asp Arg Ile Gln
               1055                1060                1065
Arg Leu Arg Gln Glu Phe Gln Gln Ala Lys Gln Asp Glu Asp Val
               1070                1075                1080
Glu Asp Arg Arg Arg Thr Tyr Ser Phe Glu Gln Pro Trp Pro Asn
               1085                1090                1095
Ala Arg Pro Ala Thr Gln Ser Gly Arg His Ser Val Ser Val Glu
               1100                1105                1110
Val Gln Met Gln Arg Gln Arg Gln Glu Glu Arg Glu Ser Ser Gln
               1115                1120                1125
Gln Ala Gln Arg Gln Tyr Ser Ser Leu Pro Arg Gln Ser Arg Lys
               1130                1135                1140
Asn Ala Ser Ser Val Ser Gln Asp Ser Trp Glu Gln Asn Tyr Ser
               1145                1150                1155
Pro Gly Glu Gly Phe Gln Ser Ala Lys Glu Asn Pro Arg Tyr Ser
               1160                1165                1170
Ser Tyr Gln Gly Ser Arg Asn Gly Tyr Leu Gly Gly His Gly Phe
               1175                1180                1185
Asn Ala Arg Val Met Leu Glu Thr Gln Glu Leu Leu Arg Gln Glu
               1190                1195                1200
```

```
Gln Arg Arg Lys Glu Gln Gln Met Lys Lys Gln Pro Pro Ser Glu
                1205                1210                1215
Gly Pro Ser Asn Tyr Asp Ser Tyr Lys Lys Val Gln Asp Pro Ser
                1220                1225                1230
Tyr Ala Pro Pro Lys Gly Pro Phe Arg Gln Asp Val Pro Pro Ser
                1235                1240                1245
Pro Ser Gln Val Ala Arg Leu Asn Arg Leu Gln Thr Pro Glu Lys
                1250                1255                1260
Gly Arg Pro Phe Tyr Ser
                1265
```